Nevada Department of Conservation and Natural Resources • Division of Environmental Protection



Bureau of Air Pollution Control 901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249 p: 775-687-9349 • <u>www.ndep.nv.gov/bapc</u>

Facility ID No. A0030Permit No. AP3241-0387.05CLASS I AIR QUALITY OPERATING PERMIT (40 CFR Part 70 Program)

Issued to: NEVADA CEMENT COMPANY (HEREINAFTER REFERRED TO AS PERMITTEE)
Mailing Address: 1290 WEST MAIN STREET, FERNLEY, NV 89408
Physical Address: 1290 WEST MAIN STREET, FERNLEY, NV 89408
Driving Directions: Take Exit 46 at Fernley, travel north on Main Street and turn right at Commerce Center Drive to enter the facility

General Facility Location:

Sections 10 and 11, T 20 N, R 24 E, MDB&M HA 76 – Fernley Area / Lyon County North 4,387,925 m, East 305,782 m, UTM Zone 11, NAD 83

Emission Unit List:

A. System 01 – Limestone	Truck Dump
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PF1.001 Limestone Truck Unloading to Primary Crusher Hopper 101

B. System 02 – Primary Crusher Circuit

S2.002	Primary Crusher 102 and associated transfers (In from Primary Crusher Hopper 101, Conveyor 104, or Conveyor 107,
	Out to Apron Feeder 103 or Drag Chain Conveyor 103-1)
S2.004	Apron Feeder 103 transfer to Conveyor 104
	Drag Chain Conveyor 103-1 transfer to Conveyor 104 [Baghouse DC-105 transfer to Screw Conveyor to Feeder 105-
S2.005	1 to Rotary Feeder 105-1A to Screw Conveyor 105-2 to Raw Mill Dust Bin. Raw Mill Dust Bin transfer to Screw
	Conveyor 220-6 to Transfer Pump 213 is 100% Fully Enclosed]
C. Systems	03 and 04 – Secondary Screening Circuit and Secondary Crushing Circuit
S2.008	Shaker Screen 106-1 and associated transfers (In from Conveyor 104 or Conveyor 106-4, Out to Conveyor 107,
52.008	Conveyor 108, or Conveyor 106-2)
S2.012	Conveyor 106-2 transfer to Conveyor 106-3
00.015	Secondary Crusher 106 and associated transfers (In from Conveyor 106-3, Out to Conveyor 106-4) [Baghouse DC-

- S2.015 S2.015 108-8 transfer to Screw Conveyor 108-3 to Incline Screw Conveyor 108-6 is 100% Fully Enclosed]
- S2.108 Incline Screw Conveyor 108-6 transfer to Belt Conveyor 108
- S2.109 Reversing Belt Conveyor 106-2 transfer to Return Belt Conveyor 107

D. System 05A – Raw Material Storage

- PF1.002 Conveyor 108 Feed End Chute
- PF1.003 Conveyor 108 transfer to Conveyor 115 via Sampler Return Conveyor 118

E. System 05B – Raw Material Storage

PF1.004 Overhead Crane 109 transfer to Storage Bins (Limestone)

F. System 05C – Raw Material Storage

- PF1.005 Overhead Crane 109 transfer to Storage Bin (Iron Ore)
- PF1.006 Overhead Crane 109 transfer to Storage Bin (Clay)

G. System 05D – Raw Material Storage

PF1.035Iron Ore Weigh Feeder 203 transfer to Belt Conveyor 204PF1.036Clay Weigh Feeder 202 transfer to Belt Conveyor 204



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE) **Emission Unit List: (continued)** H. System 05E – Raw Material Storage PF1.037 Limestone Weigh Feeder 1902 transfer to Belt Conveyor 1907 PF1.038 Limestone Weigh Feeder 1903 transfer to Belt Conveyor 1907 via Screw Conveyor 220-6 Limestone Weigh Feeder 1904 transfer to Belt Conveyor 1907 PF1.039 PF1.040 Limestone Weigh Feeder 1905 transfer to Belt Conveyor 1907 Limestone Weigh Feeder 1906 transfer to Belt Conveyor 1907 [Belt Conveyor 1907 transfer to Bucket Elevator 1908 PF1.041 is 100% Fully Enclosed] I. System 05F – Raw Material Storage Belt Conveyor 111-1 transfer to Belt Conveyor 111-2 PF1.042 J. System 06 – #1 Raw Mill (Primary Operating Scenario – Natural Gas) Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 S2.017 is 100% Fully Enclosed] S2.018 Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1 S2.019 Air Separator 206 to Air Slide 207 S2.020 Air Slide 207 transfer to Pump 213 S2.021 #1 Raw Mill 208 S2.022 Heater 211 (14 MMBtu/hr Natural Gas) K. System 06 – #1 Raw Mill (Alternative Operating Scenario – #2 Fuel Oil) Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 S2.017 is 100% Fully Enclosed] S2.018 Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1 Air Separator 206 to Air Slide 207 S2.019 S2.020 Air Slide 207 transfer to Pump 213 #1 Raw Mill 208 S2.021 S2.022 Heater 211 (10.54 MMBtu/hr #2 Fuel Oil) L. System 06A – #1 Raw Mill – Used as Finish Mill (Alternative Operating Scenario – Natural Gas) Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 S2.017 is 100% Fully Enclosed] S2.018 Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1 S2.019 Air Separator 206 to Air Slide 207 S2.020 Air Slide 207 transfer to Pump 213 S2.021 #1 Raw Mill 208 S2.022 Heater 211 (14 MMBtu/hr Natural Gas) M. System 06A – #1 Raw Mill – Used as Finish Mill (Alternative Operating – Scenario #2 Fuel Oil) Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 S2.017 is 100% Fully Enclosed] S2.018 Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1 S2.019 Air Separator 206 to Air Slide 207 S2.020 Air Slide 207 transfer to Pump 213 S2.021 #1 Raw Mill 208 S2.022 Heater 211 (10.54 MMBtu/hr #2 Fuel Oil)



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Emission Unit List: (continued)

N. System	06B – #1 Raw Mill – Used as Pre-Grind Mill (Alternative Operating Scenario – Natural Gas)
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2
S2.018	is 100% Fully Enclosed] Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1
S2.019	Air Separator 206 to Air Slide 207
S2.020	Air Slide 207 transfer to Pump 213
S2.021	#1 Raw Mill 208
S2.022	Heater 211 (14 MMBtu/hr Natural Gas)
O. System	06B – #1 Raw Mill – Used as Pre-Grind Mill (Alternative Operating Scenario – #2 Fuel Oil)
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1
S2.019	Air Separator 206 to Air Slide 207
S2.020	Air Slide 207 transfer to Pump 213
S2.021	#1 Raw Mill 208
S2.022	Heater 211 (10.54 MMBtu/hr #2 Fuel Oil)
P. System	07 – Blending Operations Storage Silo
S2.023	Pump 213 transfer to Blending and Storage Silos 300-7
S2.024	Pump Storage Silo to East or West Storage Silos
	08 – #1 Kiln Feed System
S2.025	Pump Storage Silos transfer to Kiln Feed Bin 401
S2.026 S2.179	Kiln Feed Bin 401 transfer to Air Slide A
S2.179 S2.180	Air Slide A transfer to Weigh Feeder A Weigh Feeder A transfer to Air Slide 401-1
S2.027	Air Slide 401-1 transfer to Bucket Elevator 402
S2.028	Bucket Elevator 402 transfer to Constant Head Feeder 404
S2.029	Constant Head Feeder 404 transfer to Kiln #1 406
S2.181	Air Slide A through By-Pass Chute to Air Slide 401-1
R. System	09 – #1 Kiln Circuit (Primary Operating Scenario – Coal or Coal/Coke Blend)
S2.030	Kiln #1 406 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]
S2.031	Coal Mill 805
S2.032	Screw Conveyors 420-2 and 420-3 transfer to Screw Conveyor 420-1
S2.033	Screw Conveyor 416 transfer to Screw Conveyor 420-4 [or Screw Conveyor 416-1 to Bucket Elevator 402 is 100% Fully Enclosed]
S2.034	Screw Conveyor 414-1 transfer to Screw Conveyor 420-4
S2.035	Screw Conveyor 420-1 transfer to Screw Conveyor 420-4
S2.036	Screw Conveyor 420-4 transfer to Bucket Elevator 414
S2.037	Rotary Feeder 417 transfer to Bucket Elevator 414 [Bucket Elevator 414 transfer to Screw Conveyor 414-2 to Feed Tank 401 is 100% Fully Enclosed]
S2.038	Bucket Elevator 414 transfer to Kiln #1 406
S2.129	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully Enclosed]



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Emission Unit List: (continued)

S System	n 09A – #1 Kiln Circuit (Alternative Operating Scenario – Combusting 100% Natural Gas)					
S2.030	Kiln #1 406 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]					
S2.030 S2.031	Coal Mill 805					
S2.031	Screw Conveyors 420-2 and 420-3 transfer to Screw Conveyor 420-1					
S2.032	Screw Conveyor 416 transfer to Screw Conveyor 420-4					
S2.033	Screw Conveyor 414-1 transfer to Screw Conveyor 420-4					
S2.035	Screw Conveyor 420-1 transfer to Screw Conveyor 420-4					
S2.036	Screw Conveyor 420-4 transfer to Bucket Elevator 414					
S2.037	Rotary Feeder 417 transfer to Bucket Elevator 414 [Bucket Elevator 414 transfer to Screw Conveyor 414-2 to Feed Tank 401 is 100% Fully Enclosed]					
S2.038	Bucket Elevator 414 transfer to Kiln #1 406					
S2.129	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully Enclosed]					
-	n 09B – #1 Kiln Circuit (Alternative Operating Scenario – Coal or Coal/Coke Blend, Carpet)					
S2.030	Kiln #1 406 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]					
S2.031	Coal Mill 805					
S2.032	Screw Conveyors 420-2 and 420-3 transfer to Screw Conveyor 420-1					
S2.033	Screw Conveyor 416 transfer to Screw Conveyor 420-4 [or Screw Conveyor 416-1 to Bucket Elevator 402 is 100% Fully Enclosed]					
S2.034	Screw Conveyor 414-1 transfer to Screw Conveyor 420-4					
S2.035	Screw Conveyor 420-1 transfer to Screw Conveyor 420-4					
S2.036	Screw Conveyor 420-4 transfer to Bucket Elevator 414					
S2.037	Rotary Feeder 417 transfer to Bucket Elevator 414 [Bucket Elevator 414 transfer to Screw Conveyor 414-2 to Feed Tank 401 is 100% Fully Enclosed]					
S2.038	Bucket Elevator 414 transfer to Kiln #1 406					
S2.112	Material transfer to Receiving Bins					
S2.113	Receiving Bin transfer to Belt Conveyors					
S2.114	Belt Conveyors transfer to Incline Belt to Feed Hopper					
S2.115	Feed Hopper transfer to Material Weigher					
S2.116	Material Weigher to Material Handling Fan					
S2.117	Material Handling Fan through Duct to Kiln #1 Burner					
S2.129	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully Enclosed]					
U. Systen	n 10 – #1 Kiln Clinker Cooler System					
S2.039	Kiln #1 Clinker Cooler 408					
S2.040	Clinker Breaker 409 transfer to Drag Chain 410					
S2.041	Drag Chain 410 to Bucket Elevators 412-1 or 412-2					
	Bucket Elevators 412-1 or 412-2 to Clinker Storage Stacker Tube 412-4 [Baghouse (DC-413) transfer to Screw					
S2.042	Conveyor 413-2 to Rotary Feeder 413-3 to Screw Conveyor 413-4 to Screw Conveyors 2131 or 2132 to Clinker					
	Ntomogo vo LUOU/ Lunux Lunglocod					

Storage is 100% Fully Enclosed]



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Emission Unit List: (continued)

V. System 11 – #1 Finish Mill Operations S2.124 Weigh Feeder 501 transfer to Belt Conveyor 504 S2.125 Weigh Feeder 502 transfer to Belt Conveyor 504 S2.126 Weigh Feeder 503 transfer to Belt Conveyor 504 S2.043 Conveyor 504 transfer to #1 Finish Mill 505 S2.044 #1 Finish Mill 505 Air Slide 506 transfer to Bucket Elevator 507 S2.045 S2.046 Bucket Elevator 507 transfer to Air Separator 509 via Air Slide Conveyor 508-2 S2.047 Air Separator 509 transfer to Air Slide 519-1 Air Slide 519-1 to Air Slide 519-2 and transfer to FK Pump 512 [Cement Cooler transfer to Air Slide Conveyor 508-1 S2.048 to FK Pump 512] Dust Collector 516 transfer to FK Pump 512 [or Screw Conveyor 510-1 to Rotary Feeders 510-2 and 510-3 to Air S2.049 Slide Conveyor 510-4 to Bucket Elevator 507 to Air Slide 508-2 to Air Separator 509 is 100% Fully Enclosed] W. System 12 – #2 Raw Mill System (Primary Operating Scenario – Natural Gas) Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912 transfer to Screw Conveyor 1913 to S2.050 Bucket Elevator 1908 is 100% Fully Enclosed] S2.051 Screw Conveyor 1916 transfer to Air Slide 1917 S2.052 Air Separator 1910 transfer to Air Slide 1917 Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw Conveyor 1914-3 to Screw Conveyor S2.053 1914-4 to Baghouse (DC-1914) is 100% Fully Enclosed] S2.054 Heater 1909 (14 MMBtu/hr Natural Gas) X. System 12 – #2 Raw Mill System (Alternative Operating Scenario – #2 Fuel Oil) Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912 transfer to Screw Conveyor 1913 to S2.050 Bucket Elevator 1908 is 100% Fully Enclosed] S2.051 Screw Conveyor 1916 transfer to Air Slide 1917 S2.052 Air Separator 1910 transfer to Air Slide 1917 Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw Conveyor 1914-3 to Screw Conveyor S2.053 1914-4 to Baghouse (DC-1914) is 100% Fully Enclosed] S2.054 Heater 1909 (9.06 MMBtu/hr #2 Fuel Oil) Y. System 12A – #2 Raw Mill System – Used as Finish Mill (Alternative Operating Scenario – Natural Gas) Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912 transfer to Screw Conveyor 1913 to S2.050 Bucket Elevator 1908 is 100% Fully Enclosed] S2.051 Screw Conveyor 1916 transfer to Air Slide 1917 Air Separator 1910 transfer to Air Slide 1917 S2.052 Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw Conveyor 1914-3 to Screw Conveyor S2.053 1914-4 to Baghouse (DC-1914) is 100% Fully Enclosed] S2.054 Heater 1909 (14 MMBtu/hr Natural Gas) Z. System 12A – #2 Raw Mill System (Alternative Operating Scenario – #2 Fuel Oil) Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912 transfer to Screw Conveyor 1913 to S2.050 Bucket Elevator 1908 is 100% Fully Enclosed] S2.051 Screw Conveyor 1916 transfer to Air Slide 1917 S2.052 Air Separator 1910 transfer to Air Slide 1917 Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw Conveyor 1914-3 to Screw Conveyor S2.053 1914-4 to Baghouse (DC-1914) is 100% Fully Enclosed]

S2.054 Heater 1909 (9.06 MMBtu/hr #2 Fuel Oil)



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Emission Unit List: (continued)

AA. System 13 – #2 Raw Mill

S2.055 #2 Raw Mill 1911

AB. System 14A – #2 Kiln Feed System

- S2.056 Pump Storage Silos transfer to Kiln Feed Bin 2002
- S2.057 Kiln Feed Bin 2002 transfer to Air Slide 2004
- S2.058 Air Slide 2004 transfer to Bucket Elevator 2005
- S2.059 Bucket Elevator 2005 to Constant Head Feed Screw 2006
- S2.060A Constant Head Feed Screw 2006 transfer to Kiln Feed Screw 2010
- S2.061 Kiln Feed Screw 2010 transfer to Kiln #2 2013
- S2.129 Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to
- Truck Loading Spout 2009-3 is 100% Fully Enclosed]

AC. System 14B – #2 Kiln Feed System

S2.060B Constant Head Feed Screw 2006

AD. System 15 – #2 Kiln Circuit (Primary Operating Scenario – Coal or Coal/Coke Blend)

- S2.062 Kiln #2 2013 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]
- S2.063 Coal Mill 2043
- S2.064 Baghouse Screw Conveyors to Screw Conveyor 9085
- S2.065 Screw Conveyor 9085 transfer to Bucket Elevator 2010-1
- S2.066 Bucket Elevator 2010-1 transfer to Screw 2009 and Dust Tank [Bucket Elevator 2010-1 transfer to Kiln Feed Bin 2002 is 100% Fully Enclosed]
- S2.067 Dust Tank to Weigh Screw 2009-14 [Weigh Screw 2009-14 transfer to Rotary Feeders 2009-16 and 2009-18 to Finish
- Mills #2 or #3 is 100% Fully Enclosed]
- S2.127 Portable Lime Tank for Kiln #2 2013

AE. System 15A – #2 Kiln Circuit (Alternative Operating Scenario – Natural Gas)

- S2.062 Kiln #2 2013 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]
- S2.063 Coal Mill 2043
- S2.064 Baghouse Screw Conveyors to Screw Conveyor 9085
- S2.065 Screw Conveyor 9085 transfer to Bucket Elevator 2010-1
- S2.066 Bucket Elevator 2010-1 transfer to Screw 2009 and Dust Tank [Bucket Elevator 2010-1 transfer to Kiln Feed Bin 2002 is 100% Fully Enclosed]
- S2.067 Dust Tank to Weigh Screw 2009-14 [Weigh Screw 2009-14 transfer to Rotary Feeders 2009-16 and 2009-18 to Finish Mills #2 or #3 is 100% Fully Enclosed]
- S2.127 Portable Lime Tank for Kiln #2 2013



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Emission Unit List: (continued)

AF. System 15B – #2 Kiln Circuit (Alternative Operating Scenario – Coal or Coal/Coke Blend, Carpet) S2.062 Kiln #2 2013 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed] S2.063 Coal Mill 2043 S2.064 Baghouse Screw Conveyors to Screw Conveyor 9085 S2.065 Screw Conveyor 9085 transfer to Bucket Elevator 2010-1 Bucket Elevator 2010-1 transfer to Screw 2009 and Dust Tank [Bucket Elevator 2010-1 transfer to Kiln Feed Bin S2.066 2002 is 100% Fully Enclosed] Dust Tank to Weigh Screw 2009-14 [Weigh Screw 2009-14 transfer to Rotary Feeders 2009-16 and 2009-18 to Finish S2.067 Mills #2 or #3 is 100% Fully Enclosed] Portable Lime Tank for Kiln #2 2013 S2.127 S2.118 Material transfer to Receiving Bins S2.119 Receiving Bin transfer to Belt Conveyors Belt Conveyors transfer to Incline Belt to Feed Hopper S2.120 Feed Hopper transfer to Material Weigher S2.121 S2.122 Material Weigher to Material Handling Fan S2.123 Material Handling Fan through Duct to Kiln #2 Burner AG. System 16 - #2 Kiln Clinker Cooler and Reclaim System S2.068 Kiln #2 Clinker Cooler 2017 S2.069 Clinker Breaker 2020 transfer to Drag Chain 2023 AH. System 17 – #2 Kiln Clinker Handling System Reclaim Conveyor 2116 transfer to Bucket Elevator 2117 [Baghouse (DC-2021) transfer to Screw Conveyor 2021-2 S2.070 to Rotary Feeder 2021-3 to Screw Conveyor 2021-4 to Screw Conveyors 2132 and 2131 to Air Separators 2206-1 and 2206-2 is 100% Fully Enclosed] Drag Chain 2023 transfer to Bucket Elevator 2101-1 S2.071 Bucket Elevator 2101-1 to Clinker Storage [Baghouse (DC-2102) transfer to Rotary Feeder 2102-2 to Air Slide S2.072 Conveyor 2102-4 and Drag Chain Conveyor 2201 to Finish Mill #2; Air Slide Conveyor 2102-4 transfer to Air Separator 2206-2 is 100% Fully Enclosed] AI. System 18 – #2 Finish Mill Systems Feed Bins 2201-6 and 2201-7 transfer to #2 Finish Mill 2203-1 S2.074 S2.075 #2 Finish Mill 2203-1 S2.076 Bucket Elevator 2204-1 transfer to Air Slide 2205-1 Air Slide 2205-1 transfer to Air Separator 2206-1 S2.077 Air Separator 2206-1 transfer to Pump 2212 [Baghouse (DC-2207-1) transfer to Screw Conveyor 2208-1 to Air Slide S2.078 Conveyor 2217 to Transfer Pump 2212 is 100% Fully Enclosed] AJ. System 19 – #3 Finish Mill Systems S2.073 Drag Chain 2201 transfer to Feed Bins 2201-6 and 2201-7 S2.079 Drag Chain 2201 transfer to Feed Bins 2201-8 and 2201-9 S2.080 Feed Bins 2201-8 and 2201-9 transfer to #3 Finish Mill 2203-2 S2.081 #3 Finish Mill 2203-2 S2.082 Bucket Elevator 2204-2 transfer to Screw Conveyor 2205-2 S2.083 Screw Conveyor 2205-2 transfer to Air Separator 2206-2 Air Separator 2206-2 transfer to Pump 2212 [Baghouse (DC-2207-2) transfer to Screw Conveyor 2208-2 to Air Slide S2.084 Conveyor 2217 to Transfer Pump 2212 is 100% Fully Enclosed]



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sued to:	NEVADA CEMENT COMPANY (AS PERMITTEE)
Emission U	Jnit List: (continued)
AK. Syster	n 19A – Finish Mill Feed Storage Tank and Handling (Handling Conveyors)
PF1.030	Gypsum Bin and Transfer Bin transfer to #1 Reclaim Conveyor 2110
PF1.031	#1 Reclaim Conveyor 2110 transfer to #3 Reclaim Conveyor 2116
AT. System	n 20 – Cement Storage Silo
S2.085	Transfer to Storage Silo #7 [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]
	m 21 – Cement Bulk Loading
S2.086	Silo transfers to Air Slides
S2.087	Air Slides transfer to Bucket Elevator 613
S2.088	Bucket Elevator 613 to Air Slides 609-4 and 701-1 [or Truck Loadout Air Slide 608-4 to Truck Loadout Spout 610 is 100% Fully Enclosed]
S2.089	Air Slides 609-4 and 701-1 transfer to Loading Spout 627
S2.090	Silo transfers to North Rail Storage Bin 624
S2.091	North Rail Storage Bin 624 transfer to Loading Spout 627
S2.091 S2.092	#1 Finish Mill Pump 512 transfer into Silos
32.092	#2 and #3 Finish Mill Pump 2212 and #1 and #2 Raw Mill Pump 213-10 transfer into Silos [Silo #10 transfer to Air
S2.093	Slide 606-3 to Air Slide 606-2 is 100% Fully Enclosed]
S2.093A	Railcar Unloading System A transfer into Silos
S2.093B	Railcar Unloading System B transfer into Silos [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]
AN. Syster	n 22A – Cement Bulk Loading 1
S2.094	Silo #12 Fill
S2.095	Silo #13 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]
AO System	n 22B – Cement Bulk Loading 4
AO. byster	Silos #12 and #13 to Loading Spouts 672-3 and 672-4 via Air Slides 654 - 661 [Cyclonaire Tank Loading and
S2.096	Unloading is 100% Fully Enclosed]
AP. System	n 23A – Cement Bulk Loading 2
S2.097	Silo #14 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]
AO System	n 23B – Cement Bulk Loading 3
S2.098	Silo #15 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]
AD System	n 23C - Comont Bully Londing 5
AR. Syster	n 23C – Cement Bulk Loading 5 Silos #14 and #15 to Loading Spouts 672, 1 and 672, 2 via Air Slides 662, 670 [Cyalonaira Tank Loading and
S2.099	Silos #14 and #15 to Loading Spouts 672-1 and 672-2 via Air Slides 663 - 670 [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]
AS. System	n 24 – Packhouse
·	Pack Storage Bin transfer to Bucket Elevator 704 [Air Slide 701 transfer to Pack Storage Bin to Rotary Feeder 702 to
S2.100	Air Slides 703-3, 703-4, and 703-2 to Air Slide 703-1 to Bucket Elevator 704 is 100% Fully Enclosed]
S2.101	Bucket Elevator 704 to Air Slide 705-1 and 706-1
	Air Slide 705-1 transfer to Packer 707 and Air Slides 706-1 and 706-2 [Baghouse (DC-710) transfer to Rotary Feeder
S2.102	710-1 to Air Slide Conveyor 711-2 to Bucket Elevator 704 is 100% Fully Enclosed]
AT. Syster	n 25B – Rail Unloading/Transfer
S2.104	Rail Transfer 634-8 to South Storage Bin 625
S2.105	Silo #8 transfer to South Storage Bin 625 [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]



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Emission Unit List: (continued)

AU. System 26 – Fly Ash Bulk Loading

S2.106 South Storage Bin 625 transfer to Air Slide 609-4 and to Loading Spout 610 [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]

AV. System 27A – Coal/Coke Handling (Rail Unloading)

PF1.007 Railcar Unloading to Conveyor 111

AW. System 27B - Coal/Coke Handling (Covered Conveyors)

PF1.008 Conveyor 111 transfer to Conveyor 111-1 or Conveyor 2302

- PF1.009 Conveyor 2302 transfer to Conveyor 2302-1
- PF1.010 Conveyor 2302-1 transfer to Conveyor 2302-2
- PF1.032 Conveyor 111 transfer to Conveyor 111-2
- PF1.033 Belt Conveyor 2103 transfer to Belt Conveyor 2106

AX. System 27C – Coal/Coke Handling (Coal/Coke Storage Building)

- PF1.011 Conveyor 2302-2 transfer to Belt Tripper 2303
- PF1.012 Belt Tripper 2303 transfer to Coal Storage

AY. System 27D – Coal/Coke Handling (Coal/Coke Storage Building)

- PF1.013 Inside Storage 2300-23A transfer to Weigh Feeders 2305-1, 2, 3, 4, 5
- PF1.014 Weigh Feeders 2305-1, 2, 3, 4, 5 transfer to Conveyor 2306

AZ. System 27E – Coal/Coke Handling (Coal/Coke Storage Building)

PF1.015 Conveyor 2306 transfer to Conveyor 2316

BA. System 27F – Coal/Coke Handling (Mill Building Enclosure)

PF1.016 Conveyor 2307 transfer to Coal Mill #1 Storage Bin 803

BB. System 27G - Coal/Coke Handling (Mill Building Enclosure)

- PF1.017 Storage Bin 803 transfer to Feeder Belt 804
- PF1.018 Feeder Belt 804 transfer to Coal Mill #1 805

BC. System 27H – Coal/Coke Handling (Mill Building Enclosure)

- PF1.019 Conveyor 2309 transfer to Conveyor 2307
- PF1.020 Conveyor 2316 transfer to Bin 2041, Conveyor 2309, or Screw Conveyor 2316-2

BD. System 27I – Coal/Coke Handling (Mill Building Enclosure)

- PF1.021 Storage Bin 2041 transfer to Feeder Belt 2042
- PF1.022 Feeder Belt 2042 transfer to Coal Mill #2 2043

BE. System 28A - Finish Mill Feed Storage Tank and Handling

Pneumatic Loading to Finish Mill Feed Storage Tank [Finish Mill Feed Storage Tank transfer to Rotary Feeder 2240
 to Weigh Screw Conveyor 2241 to Screw Conveyor 2242 to Screw Conveyor 2243 to Finish Mill #2 and #3 is 100%
 Fully Enclosed]

BF. System 28C – Lime Handling (Finish Mill Feed Storage Tank)

- PF1.034 Loader transfer to Feed Hopper #1
- PF1.043 Feed Hopper transfer to Feed Screw Conveyor
- PF1.044 Feed Screw Conveyor transfer to Guppy



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Emission Unit List: (continued)

BG. System 28D – Lime Handling (Finish Mill #1)

PF1.045 Loader transfer to Feed Hopper #2 [Feed Hopper transfer to Rotary Feeder is 100% Fully Enclosed]

BH. System 28E – Lime Handling (Finish Mill #2 and/or #3)

PF1.046 Loader transfer to Feed Hopper #3 [Feed Hopper transfer to Rotary Feeder is 100% Fully Enclosed]

BI. System 28F – Lime Handling

S2.128 Truck Unloading to Lime Tank

BJ. System 30 – Pony Motor #1

S2.130 Emergency Kiln Drive Engine (Deutz 74 hp, Model No. BF 4L 2011, Serial No. 10128580, Manufactured 02/2006)

BK. System 31 – Pony Motor #2

S2.131 Emergency Kiln Drive (Duetz 60.8 hp, Model No. F4L 2011, Serial No. 00847623, Manufactured 02/2006)

BL. System 32 – Portable Generator

S2.132 Emergency Generator (CAT 227 hp, Model 3306 PCT, Serial 66D32021, Manufactured 1979)

BM. System 33 – Unleaded Fuel Tank

S2.133 Unleaded Fuel Tank (3,000 gallons)

BN. System 34A - Finish Mill #4 (Dump to Hopper)

PF1.047 Dump to Crane Weigh Hopper

PF1.048 Dump to Front End Loader Weigh Hopper

BO. System 34B – Finish Mill #4 (Pozzolan Truck Dump Baghouse #3)

- S2.134 Truck to Dump Hopper
- S2.135 Truck Dump Hopper to Conveyor 8

BP. System 34C - Finish Mill #4 (Conveyor to Bucket Elevator Baghouse #4)

- S2.136 Conveyor 8 to Conveyor 1
- S2.137 Conveyor 9 to Bucket Elevator 2
- S2.138 Bucket Elevator 2 to Conveyor 1

BQ. System 34D – Finish Mill #4 (Conveyor Transfer Baghouse #2)

- S2.139 Conveyor 1 to Conveyor 2
- S2.140 Conveyor 2 to Bin 1 Feed Conveyor
- S2.141 Conveyor 1 to Conveyor 3
- S2.142 Conveyor 3 to Bin 2 Feed Conveyor
- S2.143 Conveyor 1 to Conveyor 4
- S2.144 Conveyor 4 to Bin 3 Feed Conveyor
- S2.145 Conveyor 1 to Conveyor 5
- S2.146 Conveyor 5 to Bin 4 Feed Conveyor
- S2.147 Conveyor 1 to Conveyor 6
- S2.148 Conveyor 6 to Bin 5 Feed Conveyor



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Emission Unit List: (continued)

BR. System 34E – Finish Mill #4 (Feed Mill Bins Baghouse #1)

- PF1.149 Bin 1 Feed Conveyor to Bin 1
- PF1.150 Bin 2 Feed Conveyor to Bin 2
- PF1.151 Bin 3 Feed Conveyor to Bin 3
- PF1.152 Bin 4 Feed Conveyor to Bin 4
- PF1.153 Bin 5 Feed Conveyor to Bin 5
- PF1.154 Bin 1 to Weigh Feeder 1
- PF1.155 Weigh Feeder 1 to Conveyor 7
- PF1.156 Bin 2 to Weigh Feeder 2
- PF1.157 Weigh Feeder 2 to Conveyor 7
- PF1.158 Bin 3 to Weigh Feeder 3
- PF1.159 Weigh Feeder 3 to Conveyor 7
- PF1.160 Bin 4 to Weigh Feeder 4
- PF1.161 Weigh Feeder 4 to Conveyor 7
- PF1.162 Bin 5 to Weigh Feeder 5
- PF1.163 Weigh Feeder 5 to Conveyor 7
- PF1.164 Conveyor 7 to Bucket Elevator 1

BS. System 34F - Finish Mill #4 (Gebr. Pfeiffer Mill)

- S2.165A Bucket Elevator 1 to Finish Mill #4
- S2.166A Finish Mill #4
- S2.167A Hot Gas Generator (22.185 MMBtu/hr)

BT. System 34F – Finish Mill #4 (Cemengal FLS Mill)

- S2.165B Bucket Elevator 1 to Finish Mill #4
- S2.166B Finish Mill #4
- S2.167B Hot Gas Generator (22.526 MMBtu/hr)
- BU. System 35 PAC Storage Silo
- S2.168 PAC Storage Silo Loading [PAC Storage Silo Unloading to Ductwork is 100% Fully Enclosed]

BV. System 36 – Waste PAC Storage Silo

S2.169 Waste PAC Storage Silo [Waste Storage Silo Unloading into Ductwork is 100% Fully Enclosed]

BW. System 37 – Carpet Shredding Operation

- S2.170 Primary Shredder and associated transfers (In from Conveyor Belt BC-001, Out to Reversing Belt BC-002)
- S2.171 Reversing Belt BC-002 to Conveyor Belt BC-004
- S2.172 Reversing Belt BC-004 to Drag Chain DG-001
- S2.173 Drag Chain DG-001 to Walking Floor Trailer #1
- S2.174 Drag Chain DG-001 to Walking Floor Trailer #2
- S2.175 Reversing Belt BC-002 to Conveyor Belt BC-003
- S2.176 Secondary Shredder/Crusher/Mill and associated transfers (In from Conveyor Belt BC-003, Out to Shaker Screen)
- S2.177 Shaker Screen and associated transfers (In from Secondary Shredder/Crusher/Mill, Out to Conveyor Belt BC-005 or Conveyor Belt BC-004)
- S2.178 Conveyor Belt BC-005 to Bag Loader
- S2.179 Bag Loading

****End of Emission Unit List****



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Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section I. General Conditions

A. Nevada Administrative Code (NAC) 445B.063

The Department may use any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed, to determine excess emissions.

B. NAC 445B.22013

Prohibited Discharge

The Permittee shall not cause or permit the discharge into the atmosphere from any stationary source of any hazardous air pollutant or toxic regulated air pollutant that threatens the health and safety of the general public, as determined by the Director.

C. NAC 445B.22017

Visible Emissions: Maximum Opacity; Determination and Monitoring of Opacity.

- 1. Except as otherwise provided in this section and NAC 445B.2202, the Permittee may not cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:
 - a. If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A of 40 CFR Part 60.
 - b. If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 CFR 60.13(h).
- 2. The provisions of this section and NAC 445B.2202 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.
- 3. If the provisions of 40 CFR Part 60, Subpart D or Da apply to an emission unit, the emission unit shall be allowed one 6minute period per hour of not more than 27 percent opacity as set forth in 40 CFR 60.42(a)(2) and 40 CFR 60.42a(b).
- 4. The continuous monitoring system for monitoring opacity at a facility shall be operated and maintained by the Permittee specified in the permit for the facility in accordance with NAC 445B.256 to 445B.267, inclusive.

D. NAC 445B.22067

Open Burning

The open burning of any combustible refuse, waste, garbage, oil, or for any salvage operations, except as specifically exempted, is prohibited. Specific exemptions from open burning are described in NAC 445B.22067(2).

E. NAC 445B.22087

Odors

- 1. The Permittee may not discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property.
- 2. The Director shall investigate an odor when 30 percent or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy. The sample must be at least 20 people or 75 percent of those exposed if fewer than 20 people are exposed.
- 3. The Director shall deem the odor to be a violation if he or she is able to make two odor measurements within a period of 1 hour. These measurements must be separated by at least 15 minutes. An odor measurement consists of a detectable odor after the odorous air has been diluted with eight or more volumes of odor-free air.

F. NAC 445B.225

Prohibited Conduct: Concealment of Emissions

The Permittee may not install, construct or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section I. <u>General Conditions</u> (continued)

G. NAC 445B.227

Prohibited conduct: Operation of source without required equipment; removal or modification of required equipment; modification of required procedure

Except as otherwise provided in NAC 445B.001 to 445B.390, inclusive, no person may:

- 1. Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or conditions of this Operating Permit is installed and operating.
- 2. Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable requirement or condition of the permit.

H. NAC 445B.232

Excess Emissions

- 1. Scheduled maintenance or testing or scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.100 to 445B.390, inclusive, must be approved in advance by the Director and performed during a time designated by the Director as being favorable for atmospheric ventilation.
- 2. The Permittee shall notify the Director of the proposed time and expected duration at least 30 days before any scheduled maintenance or testing which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive. The scheduled maintenance or testing must not be conducted unless the scheduled maintenance or testing is approved pursuant to NAC 445B.232(1).
- 3. The Permittee shall notify the Director of the proposed time and expected duration at least 24 hours before any scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive. The scheduled repairs must not be conducted unless the scheduled repairs are approved pursuant to NAC 445B.232(1).
- 4. The Permittee shall notify the Director by email of any excess emissions within 24 hours after any malfunction or upset of the process equipment or equipment for controlling pollution or during start-up or shutdown of that equipment. The Permittee shall send the email to eenotify@ndep.nv.gov.
- 5. The Permittee shall provide the Director, within 15 days after any malfunction, upset, start-up, shutdown or human error which results in excess emissions, sufficient information to enable the Director to determine the seriousness of the excess emissions. The information must include at least the following:
 - a. The identity of the stack or other point of emission, or both, where the excess emissions occurred.
 - b. The estimated magnitude of the excess emissions expressed in opacity or in the units of the applicable limitation on emission and the operating data and methods used in estimating the magnitude of the excess emissions.
 - c. The time and duration of the excess emissions.
 - d. The identity of the equipment causing the excess emissions.
 - e. If the excess emissions were the result of a malfunction, the steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunction.
 - f. The steps taken to limit the excess emissions.
 - g. Documentation that the equipment for controlling air pollution, process equipment or processes were at all times maintained and operated, to a maximum extent practicable, in a manner consistent with good practice for minimizing emissions.
- 6. The Permittee shall ensure that any notification or related information submitted to the Director pursuant to this section is provided in a format specified by the Director.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section I. <u>General Conditions</u> (continued)

I. NAC 445B.252

Testing and Sampling

- 1. To determine compliance with NAC 445B.001 to 445B.390, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the Director may either conduct or order the Permittee of any stationary source to conduct or have conducted such testing and sampling as the Director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the Director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial start-up of the facility and at such other times as may be required by the Director.
- 2. Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each applicable subsection of this section unless the Director:
 - a. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
 - b. Approves the use of an equivalent method;¹
 - c. Approves the use of an alternative method, the results of which the Director has determined to be adequate for indicating whether a specific stationary source is in compliance;² or
 - d. Waives the requirement for tests of performance because the Permittee of a stationary source has demonstrated by other means to the Director's satisfaction that the affected facility is in compliance with the standard.
- 3. Tests of performance must be conducted under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard.
- 4. The Permittee of an affected facility shall give notice to the Director 30 days before the test of performance to allow the Director to have an observer present. A written testing procedure for the test of performance must be submitted to the Director at least 30 days before the test of performance to allow the Director to review the proposed testing procedures.
- 5. Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the Director's approval.
- 6. All testing and sampling will be performed in accordance with recognized methods and as specified by the Director.³
- 7. The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power and other pertinent allied facilities as may be required and specified in writing by the Director must be provided and paid for by the Permittee of the stationary source.
- 8. All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with all provisions of these regulations, and copies of these results must be provided to the Director no later than 60 days after the testing or sampling, or both.
- 9. Notwithstanding the provisions of NAC 445B.252(2), the Director shall not approve an alternative method or equivalent method to determine compliance with a standard or emission limitation contained in Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations for:
 - a. An emission unit that is subject to a testing requirement pursuant to Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations; or
 - b. An affected source.

¹ Requires additional approval from the EPA Administrator.

² Requires additional approval from the EPA Administrator.

³ Requires additional approval from the EPA Administrator.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section I. <u>General Conditions</u> (continued)

J. NAC 445B.273(1)

Schedules for Compliance

All new and existing stationary sources must comply with NAC 445B.001 through 445B.390, inclusive. Existing stationary sources are in compliance with those sections and may continue to operate under the provisions of their approved compliance schedules, which may be amended from time to time.

K. NAC 445B.275

Violations: Acts constituting; notice

- 1. Failure to comply with any requirement of NAC 445B.001 to 445B.390, inclusive, any applicable requirement or any condition of an operating permit constitutes a violation. As required by NRS 445B.450, the Director shall issue a written notice of an alleged violation to the Permittee for any violation, including, but not limited to:
 - a. Failure to apply for and obtain an operating permit;
 - b. Failure to construct a stationary source in accordance with the application for an operating permit as approved by the Director;
 - c. Failure to construct or operate a stationary source in accordance with any condition of an operating permit;
 - d. Commencing construction or modification of a stationary source without applying for and receiving an operating permit or a modification of an operating permit as required by NAC 445B.001 to 445B.3477, inclusive, or a mercury operating permit to construct as required by NAC 445B.3611 to 445B.3689, inclusive;
 - e. Failure to comply with any requirement for recordkeeping, monitoring, reporting or compliance certification contained in an operating permit; or
 - Failure to pay fees as required by NAC 445B.327 or 445B.3689.
- 2. The written notice must specify the provision of NAC 445B.001 to 445B.390, inclusive, the condition of the operating permit or the applicable requirement that is being violated.
- 3. Written notice shall be deemed to have been served if delivered to the person to whom addressed or if sent by registered or certified mail to the last known address of the person.
- L. NAC 445B.305

f.

Operating permits: Imposition of more stringent standards for emissions

The Director may impose standards for emissions on a proposed stationary source that are more stringent than those found in NAC 445B.001 to 445B.390, inclusive, as a condition of approving an operating permit for the proposed stationary source.

M. NAC 445B.315

Contents of operating permits: Exception for operating permits to construct; required conditions

- 1. Notwithstanding any provision of this section to the contrary, the provisions of this section do not apply to operating permits to construct.
- 2. The Director shall cite the legal authority for each condition contained in an operating permit.
- 3. An operating permit must contain the following conditions:
 - a. The term of the operating permit is 5 years.
 - b. The Permittee shall retain records of all required monitoring data and supporting information for 5 years after the date of the sample collection, measurement, report or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.
 - c. Each of the conditions and requirements of the operating permit is severable, and if any are held invalid, the remaining conditions and requirements continue in effect.
 - d. The Permittee shall comply with all conditions of the operating permit. Any noncompliance constitutes a violation and is a ground for:
 - (1) An action for noncompliance;
 - (2) Revising, revoking, reopening and revising, or terminating the operating permit by the Director; or
 - (3) Denial of an application for a renewal of the operating permit by the Director.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section I. <u>General Conditions</u> (continued)

M. NAC 445B.315 (continued)

- Contents of operating permits: Exception for operating permits to construct; required conditions (continued)
- 3. An operating permit must contain the following conditions (continued):
 - e. The need to halt or reduce activity to maintain compliance with the conditions of the operating permit is not a defense to noncompliance with any condition of the operating permit.
 - f. The Director may revise, revoke and reissue, reopen and revise, or terminate the operating permit for cause.
 - g. The operating permit does not convey any property rights or any exclusive privilege.
 - h. The Permittee shall provide the Director, in writing and within a reasonable time, with any information that the Director requests⁴ to determine whether cause exists for revising, revoking and reissuing, reopening and revising, or terminating the operating permit, or to determine compliance with the conditions of the operating permit.
 - i. The Permittee shall pay fees to the Director in accordance with the provisions set forth in NAC 445B.327 and 445B.331.
 - j. The Permittee shall allow the Director or any authorized representative, upon presentation of credentials, to:
 - (1) Enter upon the premises of the Permittee where:
 - (a) The stationary source is located;
 - (b) Activity related to emissions is conducted; or
 - (c) Records are kept pursuant to the conditions of the operating permit;⁵
 - (2) Have access to and copy, during normal business hours, any records that are kept pursuant to the conditions of the operating permit
 - (3) Inspect, at reasonable times, any facilities, practices, operations or equipment, including any equipment for monitoring or controlling air pollution, that are regulated or required pursuant to the operating permit; and
 - (4) Sample or monitor, at reasonable times, substances or parameters to determine compliance with the conditions of the operating permit or applicable requirements.
 - k. A responsible official (as defined in NAC 445B.156) of the stationary source shall certify that, based on information and belief formed after a reasonable inquiry, the statements made in any document required to be submitted by any condition of the operating permit are true, accurate and complete.

N. NAC 445B.319, NAC 445B.342, NAC 445B.3425, and NAC 445B.344

Any changes to this operating permit will comply with all provisions established under NAC 445B.319 (Administrative Amendment),⁶ NAC 445B.342 (Notification of Authorized Change), NAC 445B.3425 (Minor Revision), and NAC 445B.344 (Significant Revision).

O. NAC 445B.325

Termination, reopening and revision, modification, and revocation and reissuance

1. A Class I operating permit must be reopened and revised to incorporate any additional applicable requirement adopted pursuant to the Act if, on the effective date of the applicable requirement, the operating permit has a remaining term of 3 or more years. The reopening must be completed no later than 18 months after the effective date of the applicable requirement.⁷

⁴ The Permittee shall submit yearly reports including, but not limited to, throughput, production, fuel consumption, hours of operation, and emissions. These reports will be submitted in the format required by the Nevada Division of Environmental Protection Bureau of Air Pollution Control and Bureau of Air Quality Planning (Air Programs) for all emission units/systems specified on the form. The report must be submitted to the Air Programs no later than March 1 annually for the preceding calendar year, unless otherwise approved by the Air Programs.

⁵ Under NAC 445B.288(3), the Permittee shall retain an operating log for emission units considered insignificant activities subject to a limitation on its hours of operation pursuant to NAC 445B.288(2) for not less than 5 years.

⁶ Under NAC 445B.287(3), an operating permit may not be transferred from one owner or piece of equipment to another. The Permittee may apply for an administrative amendment reflecting a change of ownership or the name of the stationary source.

⁷ State only requirements (only Nevada has authority to enforce).



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section I. <u>General Conditions</u> (continued)

O. NAC 445B.325 (continued)

Termination, reopening and revision, modification, and revocation and reissuance (continued)

- An operating permit may be terminated, reopened and revised, modified, or revoked and reissued if:
 - a. The Director or the Administrator determines that the operating permit contains a material mistake or is based on inaccurate statements;
 - b. The Director or the Administrator determines that the operating permit, as written, does not ensure compliance with all applicable requirements; or
 - c. The Director determines that there has been a violation of any of the provisions of NAC 445B.001 to 445B.390, inclusive, any applicable requirement, or any condition contained in the operating permit.
- 3. The Director shall notify the Permittee at least 30 days before the Director terminates, reopens and revises, revises, or revokes and reissues the operating permit. The notice must be made by certified mail and must contain the legal authority, the jurisdiction and the reasons for the action taken.⁸
- 4. If the Administrator notifies the Director and the Permittee that cause exists to reopen the operating permit, the Director shall forward to the Administrator a proposed determination of the reopening and revision, the revision of, or the revocation and reissuance of the operating permit within 90 days after receipt of the notice from the Administrator.⁹
- 5. If the Director reopens an operating permit, he or she shall revise only those portions of the operating permit for which cause exists.
- 6. The reopening of an operating permit pursuant to this section must comply with all of the relevant requirements for the issuance or revision of a permit, including the requirements related to the content of the permit and the requirements for notice, public participation and comment, and a review by any affected states.

P. NAC 445B.326

Assertion of Emergency as Affirmative Defense to Action for Noncompliance

- 1. A holder of an operating permit may assert an affirmative defense to an action brought for noncompliance with a technologybased emission limitation contained in the operating permit if the Permittee demonstrates through signed, contemporaneous operating logs or other relevant evidence, that:
 - a. An emergency occurred and the Permittee can identify the cause of the emergency;
 - b. The facility was being properly operated at the time of the emergency;
 - c. During the emergency, the Permittee took all reasonable steps to minimize excess emissions; and
 - d. The Permittee submitted notice of the emergency to the Director within 2 working days after the emergency. The notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken to restore the normal operation of the facility.
- 2. In any action for noncompliance, the Permittee who asserts the affirmative defense of an emergency has the burden of proof.

Q. NAC 445B.3265

Operating permits: Revocation and reissuance

- 1. An operating permit may be revoked if the control equipment is not operating.
- 2. An operating permit may be revoked by the Director upon determining that there has been a violation of NAC 445B.001 to 445B.390, inclusive, or the provisions of 40 CFR 52.21, or 40 CFR Part 60 or 61, Prevention of Significant Deterioration, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants, adopted by reference in NAC 445B.221.
- 3. The revocation is effective 10 days after the service of a written notice, unless a hearing is requested.
- 4. To reissue a revoked operating permit, the holder of the revoked permit must file a new application with the Director, accompanied by the fee for an initial operating permit as specified in NAC 445B.327. An environmental review of the stationary source must be conducted as though construction had not yet commenced.

⁸ State only requirements (only Nevada has authority to enforce).

⁹ State only requirements (only Nevada has authority to enforce).



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section I. <u>General Conditions</u> (continued)

R. NAC 445B.3405(1)(d)

The Permittee shall record:

- 1. Monitoring information required by the conditions of this permit including the date, the location and the time of the sampling or the measurements and the operating conditions at the time of the sampling or measurements; and
- 2. The date on which the analyses were performed, the company that performed them, the analytical techniques that the company used, and the results of such analyses.

S. NAC 445B.3405(1)(e)

- The Permittee shall:
- 1. Promptly report to the Director all deviations from the requirements of this operating permit; and
- 2. Report to the Director the probable cause of all deviations and any action taken to correct the deviations. For this operating permit, prompt is defined as submittal of a report within 15 days of the deviation. This definition does not alter any reporting requirements as established for reporting of excess emissions as required under NAC 445B.232, or for reporting of an emergency (as defined by NAC 445B.326); and
- 3. Submit reports of any required monitoring every 6 months, within 8 weeks after June 30 and December 31 of each calendar year. The reports must contain a summary of the data collected as required by all monitoring, recordkeeping and compliance requirements and as specified in this operating permit.

T. NAC 445B.3405(1)(j)

The Permittee shall submit a compliance certification annually,¹⁰ or more frequently if required by an applicable requirement, to the Director. A copy of the compliance certification must be submitted to the Administrator. A compliance certification must include:

- 1. An identification of each term or condition of the operating permit that is the basis of the certification;
- 2. The status of the stationary source's compliance with any applicable requirement;
- 3. A statement of whether compliance was continuous or intermittent;
- 4. The method used for determining compliance; and
- 5. Any other facts the Director determines to be necessary to determine compliance.

U. NAC 445B.3443

Renewal of permit

- 1. All Class I operating permits must be renewed 5 years after the date of issuance.
- 2. A complete application for the renewal of a Class I operating permit must be submitted to the Director on the form provided by the Director with the appropriate fee at least 240 days, but not earlier than 18 months, before the expiration date of the current Class I operating permit for stationary sources.¹¹
- 3. Applications for the renewal of a Class I operating permit must comply with all requirements for the issuance of an initial Class I operating permit as specified in NAC 445B.3395.
- 4. If an application for the renewal of a Class I operating permit is submitted in accordance with NAC 445B.3443(2), the stationary source may continue to operate under the conditions of the existing Class I operating permit until the Class I operating permit is renewed or the application for renewal is denied.
- 5. If an application for the renewal of a Class I operating permit is not submitted in accordance with NAC 445B.3443(2):
 - a. The stationary source may be required to cease operation when the Class I operating permit expires; and
 - b. The Permittee of the stationary source:
 - (1) Must apply for the issuance of a new Class I operating permit pursuant to NAC 445B.3375; and
 - (2) May not recommence the operation until the new Class I operating permit is issued.
- 6. The fee for the issuance of a new Class I operating permit or the renewal of a Class I operating permit is specified in NAC 445B.327.

¹⁰ The Permittee shall submit the compliance certification on or before March 1.

¹¹ The Director shall determine whether the application is complete within 60 days of receipt of the application (NAC 445B.3395). It is recommended the Permittee submit the application at least 300 days before the expiration date of the current Class I operating permit.



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Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section I. <u>General Conditions</u> (continued)

V. Nevada Revised Statute (NRS) 445B.470

Prohibited acts; penalty; establishment of violation; request for prosecution

- A person shall not knowingly:
 - a. Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information;b. Fail to pay any fee;
 - c. Falsify any material statement, representation or certification in any notice or report; or
 - d. Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions.
- 2. Any person who violates any provision of NRS 445B.470(1) shall be punished by a fine of not more than \$10,000 for each day of the violation.
- 3. The burden of proof and degree of knowledge required to establish a violation of subsection 1 are the same as those required by 42 U.S.C. § 7413(c), as that section existed on October 1, 1993.
- 4. If, in the judgment of the Director of the Department or the Director's designee, any person is engaged in any act or practice which constitutes a criminal offense pursuant to NRS 445B.100 to 445B.640, inclusive, the Director of the Department or the designee may request that the Attorney General or the district attorney of the county in which the criminal offense is alleged to have occurred institute by indictment or information a criminal prosecution of the person.
- 5. If, in the judgment of the control officer of a local air pollution control board, any person is engaged in such an act or practice, the control officer may request that the district attorney of the county in which the criminal offense is alleged to have occurred institute by indictment or information a criminal prosecution of the person.

W. ASIP NAC Article 2.5.4

Breakdown or upset, determined by the Director to be unavoidable and not the result of careless or marginal operations, shall not be considered a violation of these regulations.

X. 40 CFR 52.21(r)(4)

At such time that the Permittee becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of 40 CFR Part 52.21 paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

****End of General Conditions****



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section II. Construction Conditions

A. <u>Notification</u> (NAC 445B.250; NAC 445B.3405)

The Permittee shall notify the Director in writing of the following:

System 28C (PF1.034, PF1.043, and PF1.044), System 28D (PF1.045), System 28E (PF1.046), and System 34A through 34F (PF1.047 and PF1.048, and S2.134 – S2.167) – added on enter date permit signed.

- 1. The date construction (or reconstruction as defined under NAC 445B.247) of the affected facility is commenced, postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
- 2. The anticipated date of initial startup of an affected facility, postmarked no more than 60 days and no less than 30 days prior to such date.
- 3. The actual date of initial startup of the affected facility, postmarked within 15 days after such date.
- 4. The date upon which demonstration of the continuous monitoring system performance commences in accordance with NAC 445B.256 to 445B.267, inclusive. Notification must be postmarked not less than 30 days before such date.



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection Bureau of Air Pollution Control

Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below:

Table II-1: Initial Opacity Compliance Demonstration				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 08 – #1 Kiln Feed System	S2.025 through S2.029 and S2.179 through S2.181			
System 14B – #2 Kiln Feed System	S2.006B			
Systems 03 and 04 – Secondary Screening Circuit and Secondary Crushing Circuit	S2.008, S2.012, S2.015, S2.108, and S2.109	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.	
System 05D – Raw Material Storage	PF1.035 and PF1.036			
System 05E – Raw Material Storage	PF1.037 through PF1.041			



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 05F – Raw Material Storage	PF1.042	Opacity		
System 06 – #1 Raw Mill (Alternate Operating Scenario – #2 Fuel Oil)	S2.017 through S2.022		Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The	
System 08 – #1 Kiln Feed System	S2.025 through S2.029 and S2.179 through S2.181		minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.	
System 09B – #1 Kiln Circuit (Alternate Operating Scenario – Coal or Coal/Coke Blend Carpet)	S2.030 through S2.038, S2.112 through S2.117, and S2.129			



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 11 – #1 Finish Mill Operations	S2.043 through S2.049 and S2.124 through S2.126	Opacity		
System 12 – #2 Raw Mill System (Primary Operating Scenario – Natural Gas)	S2.050 through S2.054			
System 12 – #2 Raw Mill System (Alternate Operating Scenario – #2 Fuel Oil)	S2.050 through S2.054		Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The	
System 13 – #2 Raw Mill	\$2.055		Opacity	minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
System 15 – #2 Kiln Circuit (Primary Operating Scenario – Coal or Coal/Coke Blend)	S2.062 through S2.067 and S2.127			
System 15A – #2 Kiln Circuit (Alternate Operating Scenario - Natural Gas)	S2.062 through S2.067 and S2.127			



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)					
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures		
System 15B – #2 Kiln Circuit (Alternate Operating Scenario – Coal or Coal/Coke Blend, Carpet)	S2.062 through S2.067, S2.118 through S2.123, and S2.127	Opacity			
System 17 – #2 Kiln Clinker Handling System	S2.070 through S2.072				
System 18 – #2 Finish Mill Systems	S2.074 through S2.078		Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The		
System 19A – #3 Finish Mill System	PF1.030 and PF1.031		m		minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise e specified by an applicable subpart.
System 19 – #3 Finish Mill System	S2.073 and S2.079 through S2.084				
System 20 – Cement Silo Storage	S2.085				



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)					
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures		
System 21 – Cement Bulk Loading	S2.086 through S2.093, S2.093A, and S2.093B	Opacity			
System 22A – Cement Bulk Loading 1	S2.094 and S2.095				
System 23A – Cement Bulk Loading 2	S2.097		Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The		
System 23B – Cement Bulk Loading 3	S2.098		Opacity	ориску	minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
System 28A – Finish Mill Feed Storage Tank and Handling	S2.107				
System 28C – Lime Handling (Finish Mill Feed Storage Tank)	PF1.044 through PF1.046				



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- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in Table II-1 and Table II-2 below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)					
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures		
System 28D – Lime Handling (Finish Mill #1)	PF1.047	Opacity			
System 28E – Lime Handling (Finish Mills #2 and/or #3)	PF1.048				
System 28F – Lime Handling	S2.128		Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The		
System 29 – Cement Kiln Dust to Dump Truck	S2.129		Opacity		minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
System 34A – Finish Mill #4 – Dump to Hopper	PF1.049 and PF1.050				
System 34B – Finish Mill #4 (Pozzolan Truck Dump Baghouse #3)	S2.134 through S2.137				



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- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in Table II-1 and Table II-2 below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 34C – Finish Mill #4 (Conveyor to Bucket Elevator Baghouse #4)	S2.138 through S2.140	Opacity		
System 34D – Finish Mill #4 (Conveyor Transfer Baghouse #2)	S2.141 through S2.150			
System 34E – Finish Mill #4 (Feed Mill Bins Baghouse #1 – North and South)	S2.151 through S2.170		Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The	
System 34F – Finish Mill #4 (Gebr. Pfeiffer Mill)	S2.171A through S2.173A		opuony	minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
System 34F – Finish Mill #4 (Cemengal FLS Mill)	S2.171B through S2.173B			
System 35 – PAC Storage Silo	S2.174			



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- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-1: Initial Opacity Compliance Demonstration (continued)			
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures
System 36 – Waste PAC Storage Silo	S2.175	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
System 37 – Carpet Shredding Operations	S2.170 through S2.179		



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- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-2: Initial Performance Demonstration			
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures
Systems 03 and 04 – Secondary Screening Circuit and Secondary Crushing Circuit	S2.008, S2.012, S2.015, S2.108, and S2.109	PM _{2.5}	 Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
System 06 – #1 Raw Mill (Primary Operating Scenario – Natural Gas)	S2.017 through S2.022	PM ₁₀ /PM _{2.5}	 Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance.



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- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-2: Initial Performance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 06 – #1 Raw Mill (Alternate Operating Scenario – #2 Fuel Oil)	S2.017 through S2.022	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
		PM ₁₀ /PM _{2.5}	Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.	
			The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance.	
System 07 – Blending Operations Storage Silo	S2.023 and S2.024	PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.	
			The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.	



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-2: Initial Performance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 08 – #1 Kiln Feed System	S2.025 through S2.029 and S2.179 through S2.181	PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM _{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.	
System 10 – #1 Kiln Clinker Cooler System	S2.039 through S2.042			
System 11 – #1 Finish Mill Operations		PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
	S2.043 through S2.049 and S2.124 through S2.126	PM ₁₀ /PM _{2.5}	 Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance. 	



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-2: Initial Performance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 12 – #2 Raw Mill System (Primary Operating Scenario – Natural Gas)	S2.050 through S2.054	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
			Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.	
		PM ₁₀ /PM _{2.5}	The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance.	
System 12 – #2 Raw Mill System (Alternate Operating Scenario – #2 Fuel Oil)	S2.050 through S2.054	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
		PM ₁₀ /PM _{2.5}	 Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance. 	



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-2: Initial Performance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 12A – #2 Raw Mill System – Used as Finish Mill (Alternate Operating Scenario – Natural Gas)	S2.050 through S2.054	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
		PM ₁₀ /PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.	
			The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance.	
System 13 – #2 Raw Mill	S2.055	PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine $PM_{2.5}$ emissions. The sample time and	
System 14A – #2 Kiln Feed System	S2.056 through S2.060A, S2.061, and S2.129		 sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 	
System 16 – #2 Kiln Clinker Cooler and Reclaim System	S2.068 and S2.069		test. All particulate captured in the Method 5 test perform under this provision shall be considered PM _{2.5} for determination of compliance.	



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- B. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in Table II-1 and Table II-2 below: (continued)

System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures
System 17 – #2 Kiln Clinker Handling System	S2.070 through S2.072	PM _{2.5}	
System 18 – #2 Finish Mill Systems	S2.074 through S2.078		
System 19 – #3 Finish Mill Systems	S2.073 and S2.079 through S2.084		
System 20 – Cement Storage Silo	S2.085		Method 201A in Appendix M of 40 CFR Part 51 shall used to determine PM _{2.5} emissions. The sample time a sample volume collected for each test run shall be suffic to collect enough mass to weigh accurately. The Method 201A test required in this section may b
System 21 – Cement Bulk Loading	S2.086 through S2.093, S2.093A, and S2.093B		
System 22A – Cement Bulk Loading 1	S2.094 and S2.095		replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performe under this provision shall be considered PM _{2.5} for determination of compliance.
System 23A – Cement Bulk Loading 2	S2.097		
System 23B – Cement Bulk Loading 3	S2.098		
System 24 – Packhouse	S2.100 through S2.102		



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- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in Table II-1 and Table II-2 below: (continued)

	Table II-2: Initial Performance Demonstration (continued)			
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 25B – Rail Unloading/Transfer	S2.104 and S2.105	PM _{2.5}	 Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance. 	
System 29 – Cement Kiln Dust to Dump Truck	S2.129	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
		PM ₁₀ /PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM ₁₀ and PM _{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.	



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- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

Table II-2: Initial Performance Demonstration (continued)				
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures	
System 34B – Finish Mill #4 (Pozzolan Truck Dump Baghouse #3)		РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
	S2.134 and S2.135	PM ₁₀ /PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.	
			The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.	
System 34C – Finish Mill #4 (Conveyor to Bucket Elevator Baghouse #4)	S2.136 through S2.138	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.	
		PM10/PM2.5	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.	
			The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.	



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Section II. <u>Construction Conditions</u> (continued)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

			nce Demonstration (continued)
System Emission Uni		Pollutant To Be Tested	Testing Methods/Procedures
		РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
System 34D – Finish Mill #4 (Conveyor Transfer Baghouse #2) S2.139 throug S2.148			Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
			The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.
		РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
System 34E – Finish Mill #4 (Feed Mill Bins Baghouse #1)	60.174		Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
		PM ₁₀ /PM _{2.5}	The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.



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Section II. <u>Construction Conditions</u> (continued)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in **Table II-1 and Table II-2** below: (continued)

	Table II-2: Initial Performance Demonstration (continued)					
System Emission Unit(s)		Pollutant To Be Tested	Testing Methods/Procedures			
		PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.			
System 34F – Finish Mill #4 (Gebr. Pfeiffer Mill)	S2.165A through S2.167A		Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM10 and PM2.5 emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.			
		PM ₁₀ /PM _{2.5}	The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance.			
		PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.			
System 34F – Finish Mill #4 (Cemengal FLS Mill	S2.165B through S2.167B		Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM10 and PM2.5 emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.			
		PM ₁₀ /PM _{2.5}	The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM2.5 for determination of compliance.			



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section II. <u>Construction Conditions</u> (continued)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3405, the Permittee, upon issuance of this operating permit, shall conduct and record initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in Table II-1 and Table II-2 below: (continued)

	Table II-2: Initial Performance Demonstration (continued)					
System Emission Unit(s)		Pollutant To Be Tested	Testing Methods/Procedures			
	S2.170 through S2.179	РМ	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.			
System 37 – Carpet Shredding Operations			Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.			
		PM ₁₀ /PM _{2.5}	The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.			



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Section II. <u>Construction Conditions</u> (continued)

- B. Initial Opacity Compliance Demonstration and Initial Performance Tests (continued)
 - All initial opacity compliance demonstrations and initial performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.I. Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All initial performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
 Testing shall be conducted on the exhaust stack (nost controls)
 - 3. Testing shall be conducted on the exhaust stack (post controls).
 - 4. Initial opacity compliance demonstrations and initial performance tests in **Table II-1 and Table II-2** above, must be conducted under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the initial opacity compliance demonstrations and initial performance tests. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of the initial opacity compliance demonstrations and initial performance (NAC 445B.252(3))
 - 5. The Permittee shall give notice to the Director 30 days before the initial opacity compliance demonstrations and initial performance tests to allow the Director to have an observer present. A written testing procedure must be submitted to the Director at least 30 days before the initial opacity compliance demonstrations and initial performance tests to allow the Director to review the proposed testing procedures. (NAC 445B.252(4) and 40 CFR Part 60.7(a)(6))
 - 6. Within 60 days after completing the initial opacity compliance demonstrations and initial performance tests contained in **Table II-1 and Table II-2** of this section, the Permittee shall furnish the Director a written report of the results. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689, inclusive. (NAC 445B.252(8))
 - 7. Initial opacity compliance demonstrations and initial performance tests required under this section that are conducted below the maximum allowable throughput, shall be subject to the Director's review to determine if the throughputs during initial opacity compliance demonstrations and initial performance tests sufficient to provide adequate compliance demonstration. Should the Director determine that the initial opacity compliance demonstrations and initial performance tests.

****End of Construction Conditions****



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section III. Ambient Air Monitoring Requirements

A. Not Applicable.

****End of Ambient Air Monitoring Requirements****



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions

A. Emission Unit PF1.001

System 01 – Limestone Truck Dump		Location UTM (Zone 11, NAD 83)	
		m North	m East
PF1.001	Limestone Truck Unloading to Primary Crusher Hopper 101	4,388,201	305,806

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.001** shall be controlled by a **Wet Dust Suppression with Chemical Surfactant**.

- 2. Operating Parameters (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.001** shall not exceed **350.0** tons of **calcium**, **alumina**, **silica**, **iron**, **gypsum**, **pozzolan** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) **PF1.001** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.001** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.26** pounds per hour, nor more than **1.15** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.096 pounds per hour, nor more than 0.42 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.015 pounds per hour, nor more than 0.064 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.001** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from PF1.001 shall not exceed 64.8 pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.001** for each calendar day.
- b. Monitor and record the hours of operation for **PF1.001** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.001** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **weekly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

B. Emission Units S2.002, S2.004, and S2.005

System 02 – Primary Crusher Circuit		Location UTM (Zone 11, NAD 83)	
System 02	System 02 – Frimary Crusher Circuit		m East
S2.002	Primary Crusher 102 and associated transfers (In from Primary Crusher Hopper 101, Conveyor 104, or Conveyor 107, Out to Apron Feeder 103 or Drag Chain		305,734
	Conveyor 103-1)		
S2.004	Apron Feeder 103 transfer to Conveyor 104	4,388,206	
S2.005	Drag Chain Conveyor 103-1 transfer to Conveyor 104 [Baghouse DC-105 transfer to Screw Conveyor to Feeder 105-1 to Rotary Feeder 105-1A to Screw Conveyor 105-2 to Raw Mill Dust Bin. Raw Mill Dust Bin transfer to Screw Conveyor 220-6 to Transfer Pump 213 is 100% Fully Enclosed]	4,500,200	

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.002, S2.004, and S2.005 shall be controlled by Baghouse (DC-105).
 - <u>Descriptive Stack Parameters</u> Stack Height: 30.9 feet Stack Diameter: 2.02 feet Stack Temperature: Ambient Exhaust Flow: 14,074.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)
 - a. The maximum allowable throughput rate for S2.002, S2.004, and S2.005, each, shall not exceed 350.0 tons of calcium, alumina, silica, iron, gypsum, pozzolan per hour, averaged over a calendar day.
 - b. Hours
 - (1) **S2.002, S2.004, and S2.005, each,** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-105)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **3.50** pounds per hour, nor more than **15.3** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **3.50** pounds per hour, nor more than **15.3** tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.75 pounds per hour, nor more than 3.29 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-105**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.002**, **S2.004**, and **S2.005**, each, shall not exceed 64.8 pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

B. Emission Units S2.002, S2.004, and S2.005 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.002**, **S2.004**, and **S2.005**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.002**, **S2.004**, and **S2.005**, each, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.002**, **S2.004**, **and S2.005** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.002**, **S2.004**, and **S2.005** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1)) The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

C. Emission Units S2.008, S2.012, S2.015, S2.108, and S2.109

Swatama	Systems 02 and 04 Secondary Severaning Circuit and Secondary Crysting Circuit		Location UTM (Zone 11, NAD 83)	
Systems 03 and 04 – Secondary Screening Circuit and Secondary Crushing Circuit		m North	m East	
S2.008	Shaker Screen 106-1 and associated transfers (In from Conveyor 104 or Conveyor	4,388,164	305,762	
52.000	106-4, Out to Conveyor 107, Conveyor 108, or Conveyor 106-2)			
S2.012	Conveyor 106-2 transfer to Conveyor 106-3			
	Secondary Crusher 106 and associated transfers (In from Conveyor 106-3, Out to			
S2.015	Conveyor 106-4) [Baghouse DC-108-8 transfer to Screw Conveyor 108-3 to			
	Incline Screw Conveyor 108-6 is 100% Fully Enclosed]			
S2.108	Incline Screw Conveyor 108-6 transfer to Belt Conveyor 108			
S2.109	Reversing Belt Conveyor 106-2 transfer to Return Belt Conveyor 107			

- Air Pollution Control Equipment (NAC 445B.3405) 1.
 - Emissions from S2.008, S2.012, S2.015, S2.108, and S2.109 shall be controlled by Baghouse (DC-108-4). a.
 - **Descriptive Stack Parameters** b. Stack Height: 35.01 feet Stack Diameter: 2.59 feet Stack Temperature: Ambient Exhaust Flow: 20,573.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)
 - The maximum allowable throughput rate for S2.008, S2.012, S2.015, S2.108, and S2.109, each, shall not exceed 350.0 a. tons of calcium, alumina, silica, iron, gypsum, pozzolan per hour, averaged over a calendar day. Hours
 - b.
 - (1)S2.008, S2.012, S2.015, S2.108, and S2.109, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC 108-4)** the following pollutants in excess of the following specified limits:

- The discharge of PM (particulate matter) to the atmosphere shall not exceed 4.05 pounds per hour, nor more than 17.8 a. tons per 12-month rolling period.
- The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not b. exceed 4.05 pounds per hour, nor more than 17.8 tons per 12-month rolling period.
- The discharge of PM2.5 (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not c. exceed 1.01 pounds per hour, nor more than 4.44 tons per 12-month rolling period.
- NAC 445B.22017 The opacity from the exhaust stack of Baghouse (DC-108-4) shall not equal or exceed 20 percent. d.
- NAC 445B.22033 The maximum allowable discharge of PM₁₀ to the atmosphere from S2.008, S2.012, S2.015, e. S2.108. and S2.109. each. shall not exceed 64.8 pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

C. Emission Units S2.008, S2.012, S2.015, S2.108, and S2.109 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.008**, **S2.012**, **S2.015**, **S2.108**, and **S2.109**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.008**, **S2.012**, **S2.015**, **S2.108**, and **S2.109**, each, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.008**, **S2.012**, **S2.015**, **S2.108**, **and S2.109** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.008**, **S2.012**, **S2.015**, **S2.108**, and **S2.109** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

D. Emission Units PF1.002 and PF1.003

System 05A – Raw Material Storage		Location UTM (2	Location UTM (Zone 11, NAD 83)	
		m North	m East	
PF1.002	Conveyor 108 Feed End Chute	4,388,126	305,799	
PF1.003	Conveyor 108 transfer to Conveyor 115 via Sampler Return Conveyor 118	4,388,126	305,799	
111000		.,000,120	000,177	

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.002 and PF1.003, each,** shall be controlled by **Wet Dust Suppression with Chemical Surfactant**.

- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.002 and PF1.003, each**, shall not exceed **350.0** tons of **calcium**, **alumina, iron, silica** per hour, averaged over a calendar day.
 - b. Hours
 - (1) **PF1.002 and PF1.003, each,** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.002 and PF1.003, each,** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.26** pounds per hour, nor more than **1.15** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.096 pounds per hour, nor more than 0.42 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.015** pounds per hour, nor more than **0.064** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.002 and PF1.003, each**, shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **PF1.002 and PF1.003, each**, shall not exceed **64.8** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.002 and PF1.003, each**, for each calendar day.
- b. Monitor and record the hours of operation for **PF1.002 and PF1.003, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.002 and PF1.003, each**, on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

D. Emission Units PF1.002 and PF1.003 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

f. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **weekly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

E. Emission Unit PF1.004

System 05B – Raw Material Storage		Location UTM (Zone 11, NAD 83)	
		m North	m East
PF1.004	Overhead Crane 109 transfer to Storage Bins (Limestone)	4,388,126	305,799

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.004** shall be controlled by a **Building Enclosure**.
- 2. Operating Parameters (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.004** shall not exceed **350.0** tons of **calcium**, **alumina**, **iron**, **silica** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) **PF1.004** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.004** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.53** pounds per hour, nor more than **2.30** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.19 pounds per hour, nor more than 0.84 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.029 pounds per hour, nor more than 0.13 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.004** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from PF1.004 shall not exceed 64.8 pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.004** for each calendar day.
- b. Monitor and record the hours of operation for **PF1.004** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the enclosure installed on **PF1.004** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

F. Emission Units PF1.005 and PF1.006

System 05C – Raw Material Storage		Location UTM (Zone 11, NAD 83)	
System 05	C – Kaw Material Storage	m North	m East
PF1.005	Overhead Crane 109 transfer to Storage Bin (Iron Ore)	4,388,126	305,799
PF1.006	Overhead Crane 109 transfer to Storage Bin (Clay)	4,388,126	305,799

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.005 and PF1.006, each,** shall be controlled by a **Building Enclosure**.
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.005 and PF1.006, each**, shall not exceed **100.0** tons of **calcium**, **alumina**, **iron**, **silica** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) **PF1.005 and PF1.006, each,** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.005 and PF1.006, each,** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.15** pounds per hour, nor more than **0.66** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.055 pounds per hour, nor more than 0.24 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.0083 pounds per hour, nor more than 0.036 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.005 and PF1.006, each**, shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **PF1.005 and PF1.006, each**, shall not exceed **51.3** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.005 and PF1.006, each**, for each calendar day.
- b. Monitor and record the hours of operation for **PF1.005 and PF1.006, each,** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.



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Section IV. Specific Operating Conditions (continued)

F. Emission Units PF1.005 and PF1.006 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

f. Inspect the enclosure installed on **PF1.005 and PF1.006, each**, on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

G. Emission Units PF1.035 and PF1.036

System 05D Bayy Motorial Starage		Location UTM (Zone 11, NAD 83)	
System 051	System 05D – Raw Material Storage		m East
PF1.035	Iron Ore Weigh Feeder 203 transfer to Belt Conveyor 204	4,388,126	305,799
PF1.036	Clay Weigh Feeder 202 transfer to Belt Conveyor 204	4,388,126	305,799

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.035 and PF1.036, each,** shall be controlled by a **Building Enclosure**.

- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.035 and PF1.036, each,** shall not exceed **80.0** tons of **calcium**, **alumina, iron, silica** per hour, averaged over a calendar day.
 - b. Hours
 - (1) **PF1.035 and PF1.036, each,** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.035 and PF1.036, each,** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.12** pounds per hour, nor more than **0.53** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.044 pounds per hour, nor more than 0.19 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.0067** pounds per hour, nor more than **0.029** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.035 and PF1.036, each**, shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **PF1.035 and PF1.036, each**, shall not exceed **49.1** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.035 and PF1.036, each**, for each calendar day.
- b. Monitor and record the hours of operation for **PF1.035 and PF1.036, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the enclosure installed on **PF1.035 and PF1.036, each,** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

H. Emission Units PF1.037 through PF1.041

System 05	System 05E – Raw Material Storage		Location UTM (Zone 11, NAD 83)	
System USE – Kaw Material Storage		m North	m East	
PF1.037	Limestone Weigh Feeder 1902 transfer to Belt Conveyor 1907	4,388,126	305,799	
PF1.038	Limestone Weigh Feeder 1903 transfer to Belt Conveyor 1907 via Screw Conveyor 220-6	4,388,126	305,799	
PF1.039	Limestone Weigh Feeder 1904 transfer to Belt Conveyor 1907	4,388,126	305,799	
PF1.040	Limestone Weigh Feeder 1905 transfer to Belt Conveyor 1907	4,388,126	305,799	
PF1.041	Limestone Weigh Feeder 1906 transfer to Belt Conveyor 1907 [Belt Conveyor 1907 transfer to Bucket Elevator 1908 is 100% Fully Enclosed]	4,388,126	305,799	

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.037 through PF1.041, each**, shall be controlled by a **Building Enclosure**.

- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.037 through PF1.041, each**, shall not exceed **55.0** tons of **calcium**, **alumina**, **iron**, **silica** per hour, averaged over a calendar day.
 - b. Hours
 - (1) **PF1.037 through PF1.041, each,** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.037 through PF1.041, each**, the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.083** pounds per hour, nor more than **0.36** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.030 pounds per hour, nor more than 0.13 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.0046** pounds per hour, nor more than **0.020** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.037 through PF1.041, each**, shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **PF1.037 through PF1.041**, each, shall not exceed 45.5 pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.037 through PF1.041, each**, for each calendar day.
- b. Monitor and record the hours of operation for **PF1.037 through PF1.041, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

H. Emission Units PF1.037 through PF1.041 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the enclosure installed on **PF1.037 through PF1.041, each,** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.



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Section IV. Specific Operating Conditions (continued)

I. Emission Unit PF1.042

System 05F – Raw Material Storage		Location UTM (Zone 11, NAD 83)	
		m North	m East
PF1.042	Belt Conveyor 111-1 transfer to Belt Conveyor 111-2	4,388,126	305,799

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.042** shall be controlled by a **Building Enclosure**.

- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.042** shall not exceed **200.0** tons of **calcium**, **alumina**, **iron**, **silica** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) **PF1.042** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.042** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.30** pounds per hour, nor more than **1.31** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.11 pounds per hour, nor more than 0.48 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.017 pounds per hour, nor more than 0.073 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from **PF1.042** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from PF1.042 shall not exceed 58.5 pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. Monitor and record the throughput for **PF1.042** for each calendar day.
- b. Monitor and record the hours of operation for **PF1.042** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the enclosure installed on **PF1.042** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

J. Emission Units S2.017 through S2.022

System 06 – #1 Raw Mill (Primary Operating Scenario – Natural Gas)		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]	4,388,096	305,776
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1		
S2.019	Air Separator 206 to Air Slide 207		
S2.020	Air Slide 207 transfer to Pump 213		
S2.021	#1 Raw Mill 208		
S2.022	Heater 211 (14 MMBtu/hr Natural Gas)		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from S2.017 through S2.022 shall be controlled by Baghouse (DC-210).
- b. <u>Descriptive Stack Parameters</u> Stack Height: 69.9 feet Stack Diameter: 2.99 feet Stack Temperature: 180 °F Exhaust Flow: 22,650.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. The maximum allowable throughput rate for **S2.017 through S2.021, each**, shall not exceed **80.0** tons of **calcium**, **alumina**, **iron**, **silica** per hour, averaged over a calendar day.
- b. **S2.022** may consume only **natural gas**.
- c. <u>Descriptive Operating Parameters</u>, **S2.022**
 - (1) Heat Input rate: 14 MMBtu per hour
 - (2) Maximum Fuel Consumption Rate: 13,462.0 standard cubic feet (scf) per hour
 - Hours

d.

(1) **S2.017 through S2.022, each**, may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC 210)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **26.3** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **26.3** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.84** pounds per hour, nor more than **8.07** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.53** pounds per hour, nor more than **0.83** tons per 12-month rolling period.
- e. The discharge of **NO**_X (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.82** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-210**) shall not equal or exceed **20** percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

J. Emission Units S2.017 through S2.022 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-210**) the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.022** shall not exceed **0.55** pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.022** shall not exceed **9.80** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.017 through S2.021, each**, shall not exceed **49.1** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. <u>Natural Gas</u>
 - (1) Maintain purchase records of natural gas to determine fuel consumption rate for **S2.022** for each calendar month.
- b. Calcium, alumina, iron, silica
 - (1) Monitor and record the throughput for **S2.017 through S2.021, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.017 through S2.021** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.017 through S2.022, each**, for each calendar day.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.017 through S2.022** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.017 through S2.022** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

J. Emission Units S2.017 through S2.022 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- g. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- h. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- i. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

J. Emission Units S2.017 through S2.022 (continued)

- 6. <u>Federal Requirements</u>
 - a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u>
 - The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in **Section V** of this operating permit.
 - <u>Compliance Assurance Monitoring (CAM) (40 CFR 64.1, et.seq.)</u> The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on S2.017 through S2.022, as listed in Table J -1 below:

	Table J -1:		
Part 64 CAM Monitoring for the controls on S2.017 through S2.022			
CAM Performance Indicator===> Pressure Drop			
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.		
Measurement LocationsThe pressure taps are located at the inlet and outlet of the baghouse.			
Verification of Operational Status	Annually.		
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.		
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.		
Averaging Periods	Instantaneous reading.		
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.		
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).		
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).		



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

K. Emission Units S2.017 through S2.022

System 06 – #1 Raw Mill (Alternate Operating Scenario – #2 Fuel Oil)		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]	4,388,096	305,776
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1		
S2.019	Air Separator 206 to Air Slide 207		
S2.020	Air Slide 207 transfer to Pump 213		
S2.021	#1 Raw Mill 208		
S2.022	Heater 211 (10.54 MMBtu/hr #2 Fuel Oil)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.017 through S2.022 shall be controlled by Baghouse (DC-210).
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 69.9 feet Stack Diameter: 2.99 feet Stack Temperature: 180 °F Exhaust Flow: 22,650.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. **S2.022** may consume **#2 fuel oil** as the secondary fuel in the event of natural gas curtailment, or for economic reasons.
 - b. The maximum allowable fuel consumption rate for **S2.022** shall not exceed **75.29 gallons** per hour, averaged over a calendar day.
 - c. The maximum allowable throughput rate for **S2.017 through S2.021, each**, shall not exceed **80.0** tons of **calcium**, **alumina, iron, silica** per hour, averaged over a calendar day.
 - d. Hours
 - (1) **S2.017 through S2.022, each,** may operate a total of **24** hours per day.
 - (2) S2.017 through S2.022, each, may operate a total of 3,000 hours per 12-month rolling period.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-210)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **9.00** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 6.00 pounds per hour, nor more than 9.00 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.84** pounds per hour, nor more than **2.76** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.53** pounds per hour, nor more than **0.83** tons per 12-month rolling period.
- e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.82** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-210**) shall not equal or exceed **20** percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

K. Emission Units S2.017 through S2.022 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-210**) the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of PM_{10} to the atmosphere from S2.022 shall not exceed 0.59 pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.022** shall not exceed **7.38** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.017 through S2.021, each**, shall not exceed **49.1** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. <u>#2 Fuel Oil</u>
 - (1) Monitor and record the consumption rate of #2 fuel oil for each calendar day for S2.022 (in gallons) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in gallons per hour) for **S2.022** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Calcium, alumina, iron, silica</u>
 - (1) Monitor and record the throughput for **S2.017 through S2.021, each,** for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.017 through S2.021** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.017 through S2.022, each,** for each calendar day.
- d. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.017 through S2.022** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.017 through S2.022** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

K. Emission Units S2.017 through S2.022 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.

6. Federal Requirements

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart LLL – Portland Cement Manufacturing Industry

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in Section V of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

L. Emission Units S2.017 through S2.022

System 06A – #1 Raw Mill – Used as Finish Mill (Alternate Operating Scenario – Natural		Location UTM (Zone 11, NAD 83)	
	Gas)	m North	m East
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]	4,388,096	305,776
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1		
S2.019	Air Separator 206 to Air Slide 207		
S2.020	Air Slide 207 transfer to Pump 213		
S2.021	#1 Raw Mill 208		
S2.022	Heater 211 (14 MMBtu/hr Natural Gas)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.017 through S2.022 shall be controlled by Baghouse (DC-210).
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 69.9 feet Stack Diameter: 2.99 feet Stack Temperature: 180 °F Exhaust Flow: 22,650.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. **S2.022** may consume only **natural gas**.
- b. The maximum allowable throughput rate for **S2.017 through S2.021, each**, shall not exceed **65.0** tons of **calcium**, **alumina, iron, silica, gypsum, pozzolan, clinker** per hour, averaged over a calendar day.

Descriptive Operating Parameters, S2.022

- (1) Heat Input rate: 14 MMBtu per hour
- (2) Maximum Fuel Consumption Rate: 13,462.0 standard cubic feet (scf) per hour
- Hours

c.

d.

(1) **S2.017 through S2.022, each**, may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC 210)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **26.3** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **26.3** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.84** pounds per hour, nor more than **8.07** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.0081** pounds per hour, nor more than **0.035** tons per 12-month rolling period.
- e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed **1.35** pounds per hour, nor more than **5.90** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **4.95** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.074** pounds per hour, nor more than **0.32** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-210**) shall not equal or exceed **20** percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

L. Emission Units S2.017 through S2.022 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-210**) the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of PM_{10} to the atmosphere from S2.022 shall not exceed 0.55 pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.022** shall not exceed **9.80** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.017 through S2.021, each**, shall not exceed **47.1** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. <u>Natural Gas</u>
 - $\overline{(1)}$ Maintain purchase records of natural gas to determine fuel consumption rate for **S2.022** for each calendar month.
- b. Calcium, alumina, iron, silica, gypsum, pozzolan, clinker
 - (1) Monitor and record the throughput for **S2.017 through S2.021, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.017 through S2.021** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.017 through S2.022, each**, for each calendar day.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.017 through S2.022** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.017 through S2.022** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

L. Emission Units S2.017 through S2.022 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- g. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- h. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- i. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

L. Emission Units S2.017 through S2.022 (continued)

6. Federal Requirements

Compliance Assurance Monitoring (CAM) - (40 CFR 64.1, et.seq.)

The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on **S2.017 through S2.022**, as listed in **Table L -1** below:

Table L -1: Part 64 CAM Monitoring for the controls on S2.017 through S2.022			
			CAM Performance Indicator===>
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.		
Measurement LocationsThe pressure taps are located at the inlet and outlet of the baghouse.			
Verification of Operational Status	Annually.		
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.		
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.		
Averaging Periods	Instantaneous reading.		
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.		
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).		
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).		



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

M. Emission Units S2.017 through S2.022

System 06A – #1 Raw Mill – Used as Finish Mill (Alternate Operating Scenario – #2 Fuel		Location UTM (Zone 11, NAD 83)	
	Oil)	m North	m East
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]	4,388,096	305,776
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1		
S2.019	Air Separator 206 to Air Slide 207		
S2.020	Air Slide 207 transfer to Pump 213		
S2.021	#1 Raw Mill 208		
S2.022	Heater 211 (10.54 MMBtu/hr #2 Fuel Oil)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.017 through S2.022 shall be controlled by Baghouse (DC-210).
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 69.9 feet Stack Diameter: 2.99 feet Stack Temperature: 180 °F Exhaust Flow: 22,650.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. **S2.022** may consume **#2 fuel oil** as the secondary fuel in the event of natural gas curtailment, or for economic reasons.
 - b. The maximum allowable fuel consumption rate for **S2.022** shall not exceed **75.29 gallons** per hour, averaged over a calendar day.
 - c. The maximum allowable throughput rate for **S2.017 through S2.021, each**, shall not exceed **65.0** tons of **calcium**, **alumina, iron, silica, gypsum, pozzolan, clinker** per hour, averaged over a calendar day.
 - d. <u>Hours</u>
 - (1) S2.017 through S2.022, each, may operate a total of 24 hours per day.
 - (2) S2.017 through S2.022, each, may operate a total of 3,000 hours per 12-month rolling period.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-210)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **9.00** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 6.00 pounds per hour, nor more than 9.00 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.84** pounds per hour, nor more than **2.76** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.53** pounds per hour, nor more than **0.83** tons per 12-month rolling period.
- e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.82** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-210**) shall not equal or exceed **20** percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

M. Emission Units S2.017 through S2.022 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-210**) the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.022** shall not exceed **0.59** pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.022** shall not exceed **7.38** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.017 through S2.021, each**, shall not exceed **47.1** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. <u>#2 Fuel Oil</u>
 - (1) Monitor and record the consumption rate of **#2 fuel oil** for each calendar day for **S2.022** (in **gallons**) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in gallons per hour) for **S2.022** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Calcium, alumina, iron, silica, gypsum, pozzolan, clinker</u>
 - (1) Monitor and record the throughput for **S2.017 through S2.021, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.017 through S2.021** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.017 through S2.022, each,** for each calendar day.
- d. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.017 through S2.022** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.017 through S2.022** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

M. Emission Units S2.017 through S2.022 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days of the exceedance of 50 hours, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

N. Emission Units S2.017 through S2.022

System 06B – #1 Raw Mill – Used as Pre-Grind Mill (Alternate Operating Scenario – Location UTM (Zone 11, NA			Cone 11, NAD 83)
	Natural Gas)		m East
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket	4,388,096	305,776
	Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]		
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw		
	Conveyor 206-1		
S2.019	Air Separator 206 to Air Slide 207		
S2.020	Air Slide 207 transfer to Pump 213		
S2.021	#1 Raw Mill 208		
S2.022	Heater 211 (14 MMBtu/hr Natural Gas)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.017 through S2.022 shall be controlled by Baghouse (DC-210).
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 69.9 feet Stack Diameter: 2.99 feet Stack Temperature: 180 °F Exhaust Flow: 22,650.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. **S2.022** may consume only **natural gas**.
 - b. The maximum fuel consumption rate for S2.022 shall be 13,462.0 standard cubic feet (scf) per hour or 14 MMBtu per hour.
 - c. The maximum allowable throughput rate for **S2.017 through S2.021, each,** shall not exceed **33.0** tons of **calcium**, **alumina, iron, silica, gypsum, pozzolan, clinker** per hour, averaged over a calendar day.
 - d. <u>Hours</u>
 - (1) **S2.017 through S2.022, each,** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-210)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **26.3** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 6.00 pounds per hour, nor more than 26.3 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.84** pounds per hour, nor more than **8.07** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.0081** pounds per hour, nor more than **0.035** tons per 12-month rolling period.
- e. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed 1.35 pounds per hour, nor more than 5.90 tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **4.95** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.074** pounds per hour, nor more than **0.32** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-210**) shall not equal or exceed **20** percent.
- i. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.022** shall not exceed **0.55** pounds per MMBtu.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

N. Emission Units S2.017 through S2.022 (continued)

- Emission Limits (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-210**) the following pollutants in excess of the following specified limits: (continued)
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.022** shall not exceed **9.80** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.017 through S2.021, each**, shall not exceed **40.8** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

- a. <u>Natural Gas</u>
 - (1) Maintain purchase records of natural gas to determine fuel consumption rate for **S2.022** for each calendar month.
- b. Calcium, alumina, iron, silica, gypsum, pozzolan, clinker
 - (1) Monitor and record the throughput for **S2.017 through S2.021, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.017 through S2.021** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.017 through S2.022, each**, for each calendar day.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.017 through S2.022** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.017 through S2.022** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

N. Emission Units S2.017 through S2.022 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days of the exceedance of 50 hours, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- g. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- h. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- i. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

N. Emission Units S2.017 through S2.022 (continued)

- 6. <u>Federal Requirements</u>
 - a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u>
 - The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in **Section V** of this operating permit.
 - <u>Compliance Assurance Monitoring (CAM) (40 CFR 64.1, et.seq.)</u> The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on S2.017 through S2.022, as listed in Table N -1 below:

	Table N -1:
Part 64 0	CAM Monitoring for the controls on S2.017 through S2.022
CAM Performance Indicator===>	Pressure Drop
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.
Verification of Operational Status	Annually.
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.
Averaging Periods	Instantaneous reading.
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

O. Emission Units S2.017 through S2.022

System 06	B – #1 Raw Mill – Used as Pre-Grind Mill (Alternate Operating Scenario – #2	Location UTM (Zone 11, NAD 83)	
	Fuel Oil)		m East
S2.017	Conveyor 204 transfer to Bucket Elevator 205 [#1 Raw Mill 208 transfer to Bucket Elevator 205 via Air Slide 209-2 is 100% Fully Enclosed]	-	305,776
S2.018	Bucket Elevator 205 transfer to Air Separator 206 via Separator Feed Screw Conveyor 206-1		
S2.019	Air Separator 206 to Air Slide 207	4,388,096	
S2.020	Air Slide 207 transfer to Pump 213		
S2.021	#1 Raw Mill 208	-	
S2.022	Heater 211 (10.54 MMBtu/hr #2 Fuel Oil)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.017 through S2.022 shall be controlled by Baghouse (DC-210).
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 69.9 feet Stack Diameter: 2.99 feet Stack Temperature: 180 °F Exhaust Flow: 22,650.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. **S2.022** may consume **#2 fuel oil** as the secondary fuel in the event of natural gas curtailment, or for economic reasons.
 - b. The maximum allowable fuel consumption rate for **S2.022** shall not exceed **75.29 gallons** per hour, averaged over a calendar day.
 - c. The maximum allowable throughput rate for **S2.017 through S2.021, each**, shall not exceed **33.0** tons of **calcium**, **alumina, iron, silica, gypsum, pozzolan, clinker** per hour, averaged over a calendar day.
 - d. <u>Hours</u>
 - (1) S2.017 through S2.022, each, may operate a total of 24 hours per day.
 - (2) S2.017 through S2.022, each, may operate a total of 3,000 hours per 12-month rolling period.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-210)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **9.00** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **6.00** pounds per hour, nor more than **9.00** tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.84** pounds per hour, nor more than **2.76** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.53** pounds per hour, nor more than **0.80** tons per 12-month rolling period.
- e. The discharge of **NO**_X (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.82** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-210**) shall not equal or exceed **20** percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

O. Emission Units S2.017 through S2.022 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-210**) the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of PM_{10} to the atmosphere from S2.022 shall not exceed 0.59 pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.022** shall not exceed **7.38** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.017 through S2.021, each**, shall not exceed **40.8** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. <u>#2 Fuel Oil</u>
 - (1) Monitor and record the consumption rate of #2 fuel oil for each calendar day for S2.022 (in gallons) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in gallons per hour) for **S2.022** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Calcium, alumina, iron, silica, gypsum, pozzolan, clinker</u>
 - (1) Monitor and record the throughput for **S2.017 through S2.021, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.017 through S2.021** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.017 through S2.022, each,** for each calendar day.
- d. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.017 through S2.022** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.017 through S2.022** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



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Section IV. Specific Operating Conditions (continued)

O. Emission Units S2.017 through S2.022 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days of the exceedance of 50 hours and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.

6. Federal Requirements

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart LLL – Portland Cement Manufacturing Industry

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in Section V of this operating permit.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

P. Emission Units S2.023 and S2.024

System 07 – Blending Operations Storage Silo		Location UTM (Zone 11, NAD 83	
-		m North	m East
S2.023	Pump 213 transfer to Blending and Storage Silos 300-7	4,387,962	305,829
S2.024	Pump Storage Silo to East or West Storage Silos	1,307,902	303,027
1.	Air Pollution Control Equipment (NAC 445B.3405)a.Emissions from S2.023 and S2.024 shall be controlled by Baghouse (DC-3b.Descriptive Stack Parameters Stack Height: 99.3 feet Stack Diameter: 1.65 feet Stack Temperature: 180 °F Exhaust Flow: 3,665.0 dry standard cubic feet per minute (dscfm)	05).	
2.	Operating Parameters(NAC 445B.3405)a.The maximum allowable throughput rate for S2.023 and S2.024, each, alumina, iron, silica per hour, averaged over a calendar day.b.Hours (1) S2.023 and S2.024, each, may operate a total of 24 hours per day.	shall not exceed 135.0) tons of calcium ,
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause te exhaust stack of Baghouse (DC-305) the following pollutants in excess of the following period. a. The discharge of PM (particulate matter) to the atmosphere shall not exceed tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns exceed 0.97 pounds per hour, nor more than 4.24 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns exceed 0.39 pounds per hour, nor more than 1.69 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-3 e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere shall not exceed 54.3 pounds per hour. 	wing specified limits: 0.97 pounds per hour, s in diameter) to the at period. s in diameter) to the at period. 05) shall not equal or e	nor more than 4.24 mosphere shall not mosphere shall not exceed 20 percent.
4.	 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a crecordkeeping specified in this section. All records in the log must be identified specified records shall be entered into the log at the end of the shift, end of the day operation for the month, as appropriate. a. Monitor and record the throughput for S2.023 and S2.024, each, for each cab. Monitor and record the hours of operation for S2.023 and S2.024, each, for each cab. Monitor and record the hours of operation for S2.023 and S2.024, each, for c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly based. 	with the calendar date of operation, or the end lendar day. each calendar day. he average hourly throu tion.	of the record. All l of the final day of ughput rate shall be



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

P. Emission Units S2.023 and S2.024 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.023** and **S2.024** on a weekly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.023 and S2.024** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

Q. Emission Units S2.025 through S2.029 and S2.179 through S2.181

Swatam 0	41 Kiln Food System	Location UTM (Z	one 11, NAD 83)
System ua	3 – #1 Kiln Feed System	m North	m East
S2.025	Pump Storage Silos transfer to Kiln Feed Bin 401		305,826
S2.026	Kiln Feed Bin 401 transfer to Air Slide A		
S2.179	Air Slide A transfer to Weigh Feeder A		
S2.180	Weigh Feeder A transfer to Air Slide 401-1	4.387.968	
S2.027	Air Slide 401-1 transfer to Bucket Elevator 402	4,387,908	
S2.028	Bucket Elevator 402 transfer to Constant Head Feeder 404		
S2.029	Constant Head Feeder 404 transfer to Kiln #1 406		
S2.181	Air Slide A through By-Pass Chute to Air Slide 401-1		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from S2.025 through S2.029 and S2.179 through S2.181 shall be controlled by Baghouse (DC-405).
- b. <u>Descriptive Stack Parameters</u> Stack Height: 51.9 feet Stack Diameter: 1.0 feet Stack Temperature: 180 °F Exhaust Flow: 3,260.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **S2.025 through S2.029 and S2.179 through S2.181, each,** shall not exceed **47.0** tons of **kiln feed** per hour, averaged over a calendar day.
 - b. Hours
 - (1) S2.025 through S2.029 and S2.179 through S2.181, each, may operate a total of 24 hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-405)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.86** pounds per hour, nor more than **3.77** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **0.86** pounds per hour, nor more than **3.77** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.65** pounds per hour, nor more than **2.83** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-405**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.025 through S2.029 and S2.179 through S2.181, each,** shall not exceed **44.0** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

Q. Emission Units S2.025 through S2.029 and S2.179 through S2.181 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.025 through S2.029 and S2.179 through S2.181, each,** for each calendar day.
- b. Monitor and record the hours of operation for **S2.025 through S2.029 and S2.179 through S2.181, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.025 through S2.029 and S2.179 through S2.181** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.025 through S2.029 and S2.179 through S2.181** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. Performance and Compliance Testing (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

R. Emission Units S2.030 through S2.038 and S2.129

System 09 – #1 Kiln Circuit (Primary Operating Scenario - Coal or Coal/Coke Blend)		Location UTM (Zone 11, NAD 83	
System 05	- #1 Knn Circuit (Primary Operating Scenario - Coai or Coai/Coke Biend)	m North	m East
S2.030	Kiln #1 406 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]		
S2.031	Coal Mill 805		
S2.032	Screw Conveyors 420-2 and 420-3 transfer to Screw Conveyor 420-1		
S2.033	Screw Conveyor 416 transfer to Screw Conveyor 420-4 [or Screw Conveyor 416-1 to Bucket Elevator 402 is 100% Fully Enclosed]	-	305,825
S2.034	Screw Conveyor 414-1 transfer to Screw Conveyor 420-4		
S2.035	Screw Conveyor 420-1 transfer to Screw Conveyor 420-4	4,387,914	
S2.036	Screw Conveyor 420-4 transfer to Bucket Elevator 414	4,307,914	
S2.037	Rotary Feeder 417 transfer to Bucket Elevator 414 [Bucket Elevator 414 transfer to Screw Conveyor 414-2 to Feed Tank 401 is 100% Fully Enclosed]		
S2.038	Bucket Elevator 414 transfer to Kiln #1 406		
S2.129	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- Emissions from S2.030 through S2.038 and S2.129 shall be controlled by the following:
 - (1) **Baghouse (DC-419)** for the control of particulate matter.
 - (2) Selective Non-Catalytic Reduction (SNCR) for the control of oxides of nitrogen. The SNCR shall utilize ammonia injection into the SNCR.
- <u>Descriptive Stack Parameters</u> Stack Height: 80.0 feet Stack Diameter: 6.75 feet Stack Temperature: 295 °F Exhaust Flow: 54,868.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable fuel feed rate for **S2.031** shall not exceed **7.5** tons of **coal or coal/coke blend** per clock hour.
 - b. The maximum allowable fuel consumption rate for **S2.030** shall not exceed **178,840.0** standard cubic feet (scf) of **natural gas** per clock hour.
 - c. The **#1 Kiln Circuit** may consume the following fuels under the following conditions:
 - (1) 100% coal or a combination of coal, coke, and natural gas may be consumed at all times.
 - (2) **Non-hazardous used oils and greases** generated solely by the facility may be consumed at a maximum feed rate not to exceed **5.0** gallons per clock hour.
 - (3) **Non-hazardous hydrocarbon contaminated soils** generated solely by the facility may be consumed at a maximum feed rate not to exceed **2.5** tons per clock hour.
 - d. The maximum allowable production rate for **System 09** shall not exceed **30.55** tons of **clinker** per hour, averaged over a calendar day.
 - e. The maximum allowable throughput rate for **S2.129** shall not exceed **70.0** tons of **cement kiln dust** per hour, averaged over a calendar day, nor more than **210,000.0** tons per 12-month rolling period.
 - f. <u>Hours</u>

a.

- (1) **S2.030 through S2.038, each,** may operate a total of **24** hours per day.
- (2) **S2.129** may operate a total of **8** hours per day.
- (3) **S2.129** may operate a total of **3,000** hours per 12-month rolling period.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

R. Emission Units S2.030 through S2.038 and S2.129 (continued)

- Emission Limits (NAC 445B.305, NAC 445B.3405)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (DC-419) the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 14.8 pounds per hour, nor more than 65.0 tons per 12-month rolling period.
 - c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - d. The discharge of SO_2 (sulfur dioxide) to the atmosphere shall not exceed 42.9 pounds per hour, nor more than 187.9 tons per 12-month rolling period.
 - e. Consent Decree Limit The discharge of **SO**₂ to the atmosphere shall not exceed **1.10** pounds per ton of clinker produced, based on a 30-day rolling average.
 - f. The discharge of **NO**_X (oxides of nitrogen) to the atmosphere shall not exceed **475.8** pounds per hour, nor more than **2,084.2** tons per 12-month rolling period.
 - g. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **36.4** pounds per hour, nor more than **159.3** tons per 12-month rolling period.
 - h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **16.1** pounds per hour, nor more than **70.4** tons per 12-month rolling period.
 - i. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-419**) shall not equal or exceed **20** percent.
 - j. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.030** shall not exceed **0.31** pounds per MMBtu.
 - k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.030** shall not exceed **130.2** pounds per hour.
 - 1. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.031 through S2.038, each**, shall not exceed **40.1** pounds per hour.
 - m. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.129** shall not exceed **47.8** pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the hours of operation for S2.030 through S2.038 and S2.129, each, for each clock hour.
- b. Record the monthly hours of operation for **S2.129** and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- c. <u>Coal or Coal/Coke Blend</u>
 - (1) Monitor and record the feed rate of **coal or coal/coke blend** (in tons) for each clock hour for **S2.031** by use of a weigh belt.
 - (2) Record the feed rates of **coal or coal/coke blend** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Conduct and record an ASTM Method D5865 to determine heat content of the coal or coke for **S2.031** on each delivery.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

R. Emission Units S2.030 through S2.038 and S2.129 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- d. Non-Hazardous Used Oils and Greases
 - (1) Monitor and record the feed rate of **non-hazardous used oils and greases** (in gallons) for each clock hour for **S2.031** by use of a fuel pump rate.
 - (2) Record the feed rates of **non-hazardous used oils and greases** (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the test results verifying non-hazardous conditions of the used oils and greases. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the used oils and greases meeting the standards set forth in 40 CFR 279.11.
- e. <u>Non-Hazardous Hydrocarbon Contaminated Soils</u>
 - (1) Monitor and record the feed rate of **non-hazardous hydrocarbon contaminated soils** (in tons) for each clock hour for **S2.031** by use of a weigh feeder system.
 - (2) Record the feed rates of **non-hazardous hydrocarbon contaminated soils** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the amount of hydrocarbon contaminated soils processed and location of hydrocarbon contaminated soils generated.
 - (4) Monitor and record the test results verifying non-hazardous conditions of the hydrocarbon contaminated soils. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the hydrocarbon contaminated soils meeting the standards set forth in 40 CFR 279.11.
- f. <u>Natural Gas</u>
 - (1) Monitor and record the consumption rate of **natural gas** (in scf) for each clock hour for **S2.030** by use of a fuel flow meter.
 - (2) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- g. <u>Clinker</u>
 - (1) Monitor and record the production rate for **System 09** for each calendar day.
 - (2) Record the average hourly production rate (in tons per hour) for **System 09** using the total daily production rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- h. Cement Kiln Dust
 - (1) Monitor and record the throughput for **S2.129** for each calendar day.
 - (2) Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
 - (3) Record the throughput material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- i. Inspect the baghouse installed on **System 09** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- j. Inspect the SNCR installed on **System 09** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results, and any corrective actions taken.
- k. Calibrate, operate, and maintain a Continuous Opacity Monitoring System (COMS) to continuously measure and record the opacity (in percent opacity). The COMS shall continuously measure the opacity in accordance with the manufacturer's specifications and the requirements set forth in **Section VIII** of this operating permit. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

R. Emission Units S2.030 through S2.038 and S2.129 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the anniversary date of the previous initial performance testing or annual performance testing, and annually thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- g. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- h. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.

6. <u>Federal Requirements</u>

- a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u> The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in Section V of this operating permit.
- b. Continuous Emissions Monitoring System (CEMS) 40 CFR Part 60
 - (1) The Permittee, upon issuance of this operating permit, shall comply with the SO₂ and NO_X, CEMS requirements set forth in **Section VII** of this operating permit.
 - (2) The Permittee, upon issuance of this operating permit, shall comply with the THC CEMS requirements set forth in 40 CFR 63.1350(i) of Subpart LLL.
- c. <u>United States EPA Consent Decree</u> The Permittee, upon issuance of this operating permit, shall comply with the Consent Decree requirements set forth in **Section X** of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

S. Emission Units S2.030 through S2.038 and S2.129

System 09A – #1 Kiln Circuit (Alternate Operating Scenario – Natural Gas)		Location UTM (Zone 11, NAD 83)	
System 0	A – #1 Kim Circuit (Alternate Operating Scenario – Natural Gas)	m North	m East
S2.030	Kiln #1 406 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]		
S2.031	Coal Mill 805		
S2.032	Screw Conveyors 420-2 and 420-3 transfer to Screw Conveyor 420-1		
S2.033	Screw Conveyor 416 transfer to Screw Conveyor 420-4 [or Screw Conveyor 416-1 to Bucket Elevator 402 is 100% Fully Enclosed]		305,825
S2.034	Screw Conveyor 414-1 transfer to Screw Conveyor 420-4		
S2.035	Screw Conveyor 420-1 transfer to Screw Conveyor 420-4	4,387,914	
S2.036	Screw Conveyor 420-4 transfer to Bucket Elevator 414	4,307,914	
S2.037	Rotary Feeder 417 transfer to Bucket Elevator 414 [Bucket Elevator 414 transfer to Screw Conveyor 414-2 to Feed Tank 401 is 100% Fully Enclosed]		
S2.038	Bucket Elevator 414 transfer to Kiln #1 406		
S2.129	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from **S2.030 through S2.038** shall be controlled by the following:
 - (1) **Baghouse (DC-419)** for the control of particulate matter.
 - (2) Selective Non-Catalytic Reduction (SNCR) for the control of oxides of nitrogen. The SNCR shall utilize ammonia injection into the SNCR.
- b. <u>Descriptive Stack Parameters</u> Stack Height: 80.0 feet Stack Diameter: 6.75 feet Stack Temperature: 295 °F Exhaust Flow: 54,868.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)
 - a. **S2.030** may consume only **natural gas**.
 - b. The maximum allowable fuel consumption rate for **S2.030** shall not exceed **178,840.0** standard cubic feet (scf) of **natural gas** per clock hour.
 - c. The maximum allowable production rate for **System 09A**, shall not exceed **30.55** tons of **clinker** per hour, averaged over a calendar day.
 - d. The maximum allowable throughput rate for **S2.129** shall not exceed **70.0** tons of **cement kiln dust** per hour, averaged over a calendar day, nor more than **210,000.0** tons per 12-month rolling period.
 - e. <u>Hours</u>
 - (1) **S2.030 through S2.038, each,** may operate a total of **24** hours per day.
 - (2) **S2.129** may operate a total of **8** hours per day.
 - (3) **S2.129** may operate a total of **3,000** hours per 12-month rolling period.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

S. Emission Units S2.030 through S2.038 and S2.129 (continued)

- Emission Limits (NAC 445B.305, NAC 445B.3405)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (DC-419) the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 14.8 pounds per hour, nor more than 65.0 tons per 12-month rolling period.
 - c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **42.9** pounds per hour, nor more than **187.9** tons per 12-month rolling period.
 - e. Consent Decree Limit The discharge of **SO**₂ to the atmosphere shall not exceed **1.10** pounds per ton of clinker produced, based on a 30-day rolling average.
 - f. The discharge of **NO**_X (oxides of nitrogen) to the atmosphere shall not exceed **475.8** pounds per hour, nor more than **2,084.2** tons per 12-month rolling period.
 - g. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **36.4** pounds per hour, nor more than **159.3** tons per 12-month rolling period.
 - h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **16.1** pounds per hour, nor more than **70.4** tons per 12-month rolling period.
 - i. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-419**) shall not equal or exceed **20** percent.
 - j. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.030** shall not exceed **0.31** pounds per MMBtu.
 - k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.030** shall not exceed **130.2** pounds per hour.
 - 1. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from S2.031 through S2.038, each, shall not exceed 40.1 pounds per hour.
 - m. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.129** shall not exceed **47.8** pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the hours of operation for **S2.030 through S2.038 and S2.129, each**, for each clock hour.
- b. Record the monthly hours of operation for **S2.129** and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- c. <u>Natural Gas</u>
 - (1) Monitor and record the consumption rate of **natural gas** (in scf) for each clock hour for **S2.030** by use of a fuel flow meter.
 - (2) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- d. <u>Clinker</u>
 - (1) Monitor and record the production rate for **System 09A** for each calendar day.
 - (2) Record the average hourly production rate (in tons per hour) for **System 09A** using the total daily production rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

S. Emission Units S2.030 through S2.038 and S2.129 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. <u>Cement Kiln Dust</u>
 - (1) Monitor and record the throughput for **S2.129** for each calendar day.
 - (2) Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
 - (3) Record the throughput material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- f. Inspect the baghouse installed on **System 09A** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- g. Inspect the SNCR installed on **System 09A** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results, and any corrective actions taken.
- h. Calibrate, operate, and maintain a Continuous Opacity Monitoring System (COMS) to continuously measure and record the opacity (in percent opacity). The COMS shall continuously measure the opacity in accordance with the manufacturer's specifications and the requirements set forth in **Section VIII** of this operating permit. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the exceedance of 50 hours and annually thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.I. Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- g. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- h. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

S. Emission Units S2.030 through S2.038 and S2.129 (continued)

- 6. <u>Federal Requirements</u>
 - a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u>

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in **Section V** of this operating permit.

- b. Continuous Emissions Monitoring System (CEMS) 40 CFR Parts 60
 - (1) The Permittee, upon issuance of this operating permit, shall comply with the SO₂ and NO_X, CEMS requirements set forth in **Section VII** of this operating permit.
 - (2) The Permittee, upon issuance of this operating permit, shall comply with the THC CEMS requirements set forth in 40 CFR 63.1350(i) of Subpart LLL.
- c. <u>United States EPA Consent Decree</u> The Permittee, upon issuance of this operating permit, shall comply with the Consent Decree requirements set forth in **Section X** of this operating permit.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129

System 09	System 09B – #1 Kiln Circuit (Alternate Operating Scenario - Coal or Coal/Coke Blend,		Cone 11, NAD 83)
	Carpet)	m North	m East
S2.030	Kiln #1 406 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]		
S2.031	Coal Mill 805		
S2.032	Screw Conveyors 420-2 and 420-3 transfer to Screw Conveyor 420-1		
S2.033	Screw Conveyor 416 transfer to Screw Conveyor 420-4 [or Screw Conveyor 416-1 to Bucket Elevator 402 is 100% Fully Enclosed]		
S2.034	Screw Conveyor 414-1 transfer to Screw Conveyor 420-4		
S2.035	Screw Conveyor 420-1 transfer to Screw Conveyor 420-4		
S2.036	Screw Conveyor 420-4 transfer to Bucket Elevator 414		
S2.037	Rotary Feeder 417 transfer to Bucket Elevator 414 [Bucket Elevator 414 transfer to Screw Conveyor 414-2 to Feed Tank 401 is 100% Fully Enclosed]	4 207 014	305,825
S2.038	Bucket Elevator 414 transfer to Kiln #1 406	4,387,914	
S2.112	Material transfer to Receiving Bins		
S2.113	Receiving Bin transfer to Belt Conveyors		
S2.114	Belt Conveyors transfer to Incline Belt to Feed Hopper		
S2.115	Feed Hopper transfer to Material Weigher		
S2.116	Material Weigher to Material Handling Fan		
S2.117	Material Handling Fan through Duct to Kiln #1 Burner		
S2.129	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067) transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully Enclosed]		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - Emissions from S2.030 through S2.038, S2.112 through S2.117, and S2.129 shall be controlled by the following:
 - (1) **Baghouse (DC-419)** for the control of particulate matter.
 - (2) Selective Non-Catalytic Reduction (SNCR) for the control of oxides of nitrogen. The SNCR shall utilize ammonia injection into the SNCR.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 80.0 feet Stack Diameter: 6.75 feet Stack Temperature: 295 °F Exhaust Flow: 54,868.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)

a.

- a. The maximum allowable fuel feed rate for **S2.031** shall not exceed **7.5** tons of **coal or coal/coke blend** per clock hour.
- b. The maximum allowable fuel consumption rate for **S2.030** shall not exceed **178,840.0** standard cubic feet (scf) of **natural gas** per clock hour.
- c. The maximum allowable feed rate for **S2.031** shall not exceed **2.5** tons of **post-consumer carpet** per clock hour.
- d. The **post-consumer carpet** shall meet the definition of solid waste as define in 40 CFR Part 241.2.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

- 2. <u>Operating Parameters</u> (NAC 445B.3405) (continued)
 - e. OPTC AP3241-3431, Air Case 7770 The **post-consumer carpet** shall meet the following specifications:

Table IV-1: Post-Consumer Carpet Specifications					
Test Parameter	Test Method	Test Description	Initial Value	Upper Limit	Lower Limit
Btu/lb	ASTM D5865	Average Heating Value	9,049	TBD	TBD
	ASTM D5142	Moisture, wt%	0.44	TBD	TBD
	ASTM D5142	Ash, wt%	9.14	TBD	TBD
Proximate Analysis	ASTM D5142	Volatile Matter, wt%	81.50	TBD	TBD
	ASTM D5142	Fixed Carbon, wt%	8.92	TBD	TBD
	ASTM D5142	Total	100.00	TBD	TBD
	ASTM D3176	Moisture, wt%	0.44	TBD	TBD
	ASTM D5142/5373	Ash, wt%	9.14	TBD	TBD
	ASTM D5142/5373	Carbon, wt%	59.60	TBD	TBD
T 114'	ASTM D5142/5373	Hydrogen, wt%	4.35	TBD	TBD
Ultimate Analysis	ASTM D5142/5373	Nitrogen, wt%	0.59	TBD	TBD
	ASTM D5142/5373	Sulfur, wt%	0.10	TBD	TBD
	ASTM D5142/5373	Oxygen, wt%	25.78	TBD	TBD
	ASTM D5142/5373	Total	100.00	TBD	TBD
Total Chlorine	ASTM D4208		TBD	TBD	TBD
Total Hydrocarbons	ASTM D4208	For Range C8 to C40	TBD	TBD	TBD
Metals by ICP	EPA SW846 6010	As, Be, Cd, Cr, Pb, Mn, Ni, Se	TBD	TBD	TBD
Total Mercury	EPA SW846 7471		TBD	TBD	TBD

- f. The **#1 Kiln Circuit** may consume the following fuels under the following conditions:
 - (1) **Post-consumer carpet** may be consumed at a maximum feed rate of **2.5** tons per clock hour and up to of **7.50** tons per clock hour of **coal or coal/coke blend**. The post-consumer carpet will meet the definition of solid waste as defined in 40 CFR Part 241.2.
 - (2) **Natural gas** may be consumed with the coal or coal/coke blend.
 - (3) **Non-hazardous used oils and greases** generated solely by the facility may be consumed at a maximum feed rate not to exceed **5.0** gallons per clock hour.
 - (4) Non-hazardous hydrocarbon contaminated soils generated solely by the facility may be consumed at a maximum feed rate not to exceed 2.5 tons per clock hour.
- g. The maximum allowable production rate for **System 09B** shall not exceed **30.55** tons of **clinker** per hour, averaged over a calendar day.
- h. The maximum allowable throughput rate for **S2.129** shall not exceed **70.0** tons of **cement kiln dust** per hour, averaged over a calendar day, nor more than **210,000.0** tons per 12-month rolling period.
- i. <u>Hours</u>
 - (1) **S2.030 through S2.038, and S2.112 through S2.117 each,** may operate a total of **24** hours per day.
 - (2) **S2.129** may operate a total of **8** hours per day.
 - (3) **S2.129** may operate a total of **3,000** hours per 12-month rolling period.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-419**) the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **2.77** pounds per hour, nor more than **12.2** tons per 12-month rolling period.
 - b. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **PM** to the atmosphere shall not exceed **13.5** milligram per dry standard cubic meter.
 - c. The discharge of **PM**₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **2.77** pounds per hour, nor more than **12.2** tons per 12-month rolling period.
 - d. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 2.77 pounds per hour, nor more than 12.2 tons per 12-month rolling period.
 - e. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **42.9** pounds per hour, nor more than **187.9** tons per 12-month rolling period.
 - f. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **SO**₂ to the atmosphere shall not exceed **600.0** parts per million by volume.
 - g. Consent Decree Limit The discharge of SO_2 to the atmosphere shall not exceed 1.10 pounds per ton of clinker produced, based on a 30-day rolling average.
 - h. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed **251.3** pounds per hour, nor more than **1,100.8** tons per 12-month rolling period.
 - i. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **NO**_X to the atmosphere shall not exceed **630.0** parts per million by volume.
 - j. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **26.7** pounds per hour, nor more than **117.0** tons per 12-month rolling period.
 - k. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **CO** to the atmosphere shall not exceed **110.0** parts per million by volume.
 - 1. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **8.37** pounds per hour, nor more than **36.7** tons per 12-month rolling period.
 - m. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-419**) shall not equal or exceed **20** percent.
 - n. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.030** shall not exceed **0.31** pounds per MMBtu.
 - o. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.030** shall not exceed **130.2** pounds per hour.
 - p. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.031 through S2.038, each**, shall not exceed **40.1** pounds per hour.
 - q. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.129** shall not exceed **47.8** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the hours of operation for **S2.030 through S2.038**, **S2.112 through S2.117**, and **S2.129**, each, for each clock hour.
- b. Record the monthly hours of operation for **S2.129** and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- c. <u>Coal or Coal/Coke Blend</u>
 - (1) Monitor and record the feed rate of **coal or coal/coke blend** (in tons) for each clock hour for **S2.031** by use of a weigh belt.
 - (2) Record the feed rates of **coal or coal/coke blend** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- (3) Conduct and record an ASTM Method D5865 to determine heat content of the coal or coke on each delivery.d. <u>Post-Consumer Carpet</u> – OPTC AP3241-3431, Air Case 7770
 - (1) Monitor and record the feed rate of **post-consumer carpet** (in tons) for each clock hour for **S2.117** by use of a weigh feeder system.
 - (2) Record the feed rates of **post-consumer carpet** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Conduct and record an ASTM D5865 to determine the average heating value (Btu) on a **quarterly** basis.
 - (4) Conduct and record an ASTM Methods D5142 (Proximate) and D3176 (Ultimate) to determine moisture content, ash content, volatile matter, fixed carbon content, carbon, hydrogen, nitrogen, sulfur, and oxygen (proximate and ultimate analysis) on a **quarterly** basis.
 - (5) Conduct and record an ASTM Method D4208 to determine the total chlorine and total hydrocarbons on a **quarterly** basis.
 - (6) Conduct and record an EPA Test Methods SW846 6010 and 7471 (Mercury Only) to determine metals content (As, Be, Cd, Cr, Pb, Mn, Ni, Se and total Hg) on an **annual** basis.
- e. <u>Non-Hazardous Used Oils and Greases</u>
 - (1) Monitor and record the feed rate of **non-hazardous used oils and greases** (in gallons) for each clock hour for **S2.031** by use of a fuel pump rate.
 - (2) Record the feed rates of **non-hazardous used oils and greases** (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the test results verifying non-hazardous conditions of the used oils and greases. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the used oils and greases meeting the standards set forth in 40 CFR 279.11.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- f. <u>Non-Hazardous Hydrocarbon Contaminated Soils</u>
 - (1) Monitor and record the feed rate of **non-hazardous hydrocarbon contaminated soils** (in tons) for each clock hour for **S2.031** by use of a weigh feeder system.
 - (2) Record the feed rates of **non-hazardous hydrocarbon contaminated soils** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the amount of hydrocarbon contaminated soils processed and location of hydrocarbon contaminated soils generated.
 - (4) Monitor and record the test results verifying non-hazardous conditions of the hydrocarbon contaminated soils. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the hydrocarbon contaminated soils meeting the standards set forth in 40 CFR 279.11.

g. Natural Gas

- (1) Monitor and record the consumption rate of **natural gas** (in scf) for each clock hour for **S2.030** by use of a fuel flow meter.
- (2) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- h. Clinker
 - (1) Monitor and record the production rate for **System 09B** for each calendar day.
 - (2) Record the average hourly production rate (in tons per hour) for **System 09B** using the total daily production rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.

i. Cement Kiln Dust

- (1) Monitor and record the throughput for **S2.129** for each calendar day.
- (2) Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- (3) Record the throughput material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- j. Inspect the baghouse installed on **System 09B** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- k. Inspect the SNCR installed on **System 09B** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results, and any corrective actions taken.
- 1. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- m. <u>Compliance with the Projected Actual Emissions (PAE)</u> OPTC AP3241-3431, Air Case 7770
 - (1) The Permittee shall demonstrate compliance with the Projected Actual Emissions (PAE) by reporting the actual 12-month rolling period emissions on a **quarterly** basis, commencing with the first quarter following June 2016. The Permittee shall comply with the following PAE limits:
 - (a) PM 45.2 tons per 12-month rolling period.
 - (b) $PM_{10} 40.2$ tons per 12 month rolling period.
 - (c) $PM_{2.5} 37.7$ tons per 12 month rolling period.
 - (d) $NO_x 1,632.2$ tons per 12-month rolling period.
 - (e) CO 154.3 tons per 12-month rolling period.
 - (f) $SO_2 95.6$ tons per 12-month rolling period.
 - (g) VOC 55.0 tons per 12-month rolling period.
 - (h) Lead (Pb) 0.29 tons per 12-month rolling period.
 - (i) Fluoride (F) 1.37 tons per 12-month rolling period.
 - (2) If the 12-month rolling period emissions exceed the limit specified in above, the Permittee is also required to provide justification in the report that the revision was not a Prevention of Significant Deterioration (PSD) Major Modification.
- n. Calibrate, operate, and maintain a Continuous Opacity Monitoring System (COMS) to continuously measure and record the opacity (in percent opacity). The COMS shall continuously measure the opacity in accordance with the manufacturer's specifications and the requirements set forth in **Section VIII** of this operating permit. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the anniversary date of the previous initial performance testing or annual performance testing, and annually thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1)) (continued)

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the anniversary date of the previous initial performance testing or annual performance testing, and annually thereafter, in accordance with the following: (continued)

- g. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.
- 6. <u>Federal Requirements</u>
 - a. <u>Federal Plan Requirements 40 CFR Part 62 Subpart IIIa Commercial and Industrial Solid Waste Incineration</u> <u>Units</u>

The Permittee, upon issuance of this operating permit or 30 days after the date of publication in the Federal Register, whichever date comes first, shall comply with Subpart IIIa requirements set forth in **Section VI** of this operating permit.

- b. <u>Continuous Emissions Monitoring System (CEMS) 40 CFR Part 60</u> The Permittee, upon issuance of this operating permit, shall comply with the SO₂, NO_X, CO, THC, and HCl CEMS requirements set forth in **Section VII** of this operating permit.
- <u>Prevent of Significant Deterioration of Air Quality (PSD) 40 CFR Part 52.21</u> The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in Section IX of this operating permit.

d. <u>United States EPA Consent Decree</u> The Permittee, upon issuance of this operating permit, shall comply with the Consent Decree requirements set forth in **Section X** of this operating permit.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

T. Emission Units S2.030 through S2.038, S2.112 through S2.117, and S2.129 (continued)

5. Performance and Compliance Testing (NAC 445B.3405, (NAC 445B.252(1)) (continued)

e. <u>Compliance Assurance Monitoring (CAM) – (40 CFR 64.1, et.seq.)</u>

The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on **S2.030 through S2.038**, **S2.112 through S2.117**, and **S2.129**, as listed in **Table T -1** below:

	Table T -1:				
	Part 64 CAM Monitoring for the controls on S2.030 through S2.038, S2.112 through S2.117, and S2.129				
CAM Performance Indicator===>	Pressure Drop				
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.				
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.				
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.				
Verification of Operational Status	Annually.				
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.				
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.				
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.				
Averaging Periods	Instantaneous reading.				
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.				
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).				
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).				



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

U. Emission Units S2.039 through S2.042

System 10 #1 Kiln Clinker Cooler System		Location UTM (Zone 11, NAD 83)	
System 10	System 10 – #1 Kiln Clinker Cooler System		m East
S2.039	Kiln #1 Clinker Cooler 408		305,757
S2.040	Clinker Breaker 409 transfer to Drag Chain 410	4,388,093	
S2.041	Drag Chain 410 to Bucket Elevators 412-1 or 412-2		
	Bucket Elevators 412-1 or 412-2 to Clinker Storage Stacker Tube 412-4 [Baghouse		
S2.042	(DC-413) transfer to Screw Conveyor 413-2 to Rotary Feeder 413-3 to Screw		
52.042	Conveyor 413-4 to Screw Conveyors 2131 or 2132 to Clinker Storage is 100%		
	Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from S2.039 through S2.042 shall be controlled by Baghouse (DC-413).
- b. <u>Descriptive Stack Parameters</u> Stack Height: 53.1 feet Stack Diameter: 4.99 feet Stack Temperature: 225 °F Exhaust Flow: 60,000.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **S2.039 through S2.042, each,** shall not exceed **31.0** tons of **clinker** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) **S2.039 through S2.042, each,** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-413)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) (filterable and condensable) to the atmosphere shall not exceed **3.00** pounds per hour, nor more than **13.1** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **3.00** pounds per hour, nor more than **13.1** tons per 12-month rolling period.
- c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **2.06** pounds per hour, nor more than **9.01** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-413**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.039 through S2.042, each**, shall not exceed **40.2** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

U. Emission Units S2.039 through S2.042 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.039 through S2.042**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.039 through S2.042**, each, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.039 through S2.042** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.039 through S2.042** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- 6. <u>Federal Requirements</u>

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart LLL – Portland Cement Manufacturing Industry

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in **Section** V of this operating permit.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

V. Emission Units S2.043 through S2.049 and S2.124 through S2.126

Swatam 11	#1 Finish Mill Onerations	Location UTM (Zone 11, NAD 8	
System 11 -	ystem 11 – #1 Finish Mill Operations		m East
S2.124	Weigh Feeder 501 transfer to Belt Conveyor 504		
S2.125	Weigh Feeder 502 transfer to Belt Conveyor 504		
S2.126	Weigh Feeder 503 transfer to Belt Conveyor 504		
S2.043	Conveyor 504 transfer to #1 Finish Mill 505		
S2.044	#1 Finish Mill 505	_	
S2.045	Air Slide 506 transfer to Bucket Elevator 507		
S2.046	Bucket Elevator 507 transfer to Air Separator 509 via Air Slide Conveyor 508-2	4,388,094	305,773
S2.047	Air Separator 509 transfer to Air Slide 519-1		
52.049	Air Slide 519-1 to Air Slide 519-2 and transfer to FK Pump 512 [Cement Cooler		
S2.048	transfer to air Slide Conveyor 508-1 to FK Pump 512]	-	
	Dust Collector 516 transfer to FK Pump 512 [or Screw Conveyor 510-1 to Rotary		
S2.049	Feeders 510-2 and 510-3 to Air Slide Conveyor 510-4 to Bucket Elevator 507 to		
	Air Slide 508-2 to Air Separator 509 is 100% Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

a. Emissions from S2.043 through S2.049 and S2.124 through S2.126 shall be controlled by Baghouse (DC-516).

- <u>Descriptive Stack Parameters</u> Stack Height: 65.0 feet Stack Diameter: 2.0 feet Stack Temperature: 160 °F Exhaust Flow: 11,205.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for S2.043 through S2.049 and S2.124 through S2.126, each, shall not exceed 45.0 tons of clinker, pozzolan, gypsum, lime, cement kiln dust, slag, fly ash, limestone per hour, averaged over a calendar day.
 - b. Hours (1) **S2.043 through S2.049 and S2.124 through S2.126, each,** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-516)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **3.12** pounds per hour, nor more than **13.7** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **3.12** pounds per hour, nor more than **13.7** tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.78 pounds per hour, nor more than 3.41 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-516**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.043 through S2.049 and S2.124 through S2.126, each**, shall not exceed **43.6** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

V. Emission Units S2.043 through S2.049 and S2.124 through S2.126 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.043 through S2.049 and S2.124 through S2.126, each,** for each calendar day.
- b. Monitor and record the hours of operation for **S2.043 through S2.049 and S2.124 through S2.126, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.043 through S2.049 and S2.124 through S2.126** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the monthly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.043 through S2.049 and S2.124 through S2.126** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

W. Emission Units S2.050 through S2.054

System 12 #2 Day Mill System (Drimany Onerating Secondria Natural Cas)		Location UTM (Zone 11, NAD 83)	
System 12	System 12 – #2 Raw Mill System (Primary Operating Scenario – Natural Gas)		m East
S2.050	Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912		
52.050	transfer to Screw Conveyor 1913 to Bucket Elevator 1908 is 100% Fully Enclosed]		
S2.051	Screw Conveyor 1916 transfer to Air Slide 1917		305,800
S2.052	Air Separator 1910 transfer to Air Slide 1917	1 200 001	
	Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw	4,388,084	
S2.053	Conveyor 1914-3 to Screw Conveyor 1914-4 to Baghouse (DC-1914) is 100%		
	Fully Enclosed]		
S2.054	Heater 1909 (14 MMBtu/hr Natural Gas)]	

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from **S2.050 through S2.054** shall be controlled by **Baghouse (DC-1914)**.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 44.0 feet Stack Diameter: 2.3 feet Stack Temperature: 180 °F Exhaust Flow: 10,200.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **S2.050 through S2.053**, each, shall not exceed **55.0** tons of **calcium**, alumina, iron, silica per hour, averaged over a calendar day.
 - b. **S2.054** may consume only **natural gas**.
 - c. <u>Descriptive Operating Parameters</u>, **S2.054**
 - (1) Heat Input rate: 14 MMBtu per hour
 - (2) Maximum Fuel Consumption Rate: 13,461.5 standard cubic feet (scf) per hour
 - Hours

d.

(1) **S2.050 through S2.054, each,** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.56** pounds per hour, nor more than **6.82** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.46** pounds per hour, nor more than **0.72** tons per 12-month rolling period.
- e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.74** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of Baghouse (DC-1914) shall not equal or exceed 20 percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

W. Emission Units S2.050 through S2.054 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.054** shall not exceed **0.55** pounds per MMBtu.j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.054** shall not exceed **9.80** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.051 through S2.053, each**, shall not exceed **45.5** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

a. <u>Natural Gas</u>

b.

(1) Maintain purchase records of natural gas to determine fuel consumption rate for **S2.054** for each calendar month.

- Calcium, alumina, iron, silica
 - (1) Monitor and record the throughput for **S2.050 through S2.053, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.050 through S2.053, each**, using the total daily throughput rate and total daily hours of operation.
- (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.050 through S2.054, each**, for each calendar day.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.050 through S2.054** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.050 through S2.054** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

W. Emission Units S2.050 through S2.054 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.

6. <u>Federal Requirements</u>

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart LLL – Portland Cement Manufacturing Industry

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in Section V of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

X. Emission Units S2.050 through S2.054

System 12 #2 Bow Mill System (Alternate Onerating Secondria #2 Evel Oil)		Location UTM (Zone 11, NAD 83)	
System 12	System 12 – #2 Raw Mill System (Alternate Operating Scenario – #2 Fuel Oil)		m East
S2.050	Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912	- 4,388,084	305,800
	transfer to Screw Conveyor 1913 to Bucket Elevator 1908 is 100% Fully Enclosed]		
S2.051	Screw Conveyor 1916 transfer to Air Slide 1917		
S2.052	Air Separator 1910 transfer to Air Slide 1917		
	Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw		
S2.053	Conveyor 1914-3 to Screw Conveyor 1914-4 to Baghouse (DC-1914) is 100%		
	Fully Enclosed]		
S2.054	Heater 1909 (9.06 MMBtu/hr #2 Fuel Oil)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from **S2.050 through S2.054** shall be controlled by **Baghouse (DC-1914)**.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 44.0 feet Stack Diameter: 2.3 feet Stack Temperature: 180 °F Exhaust Flow: 10,200.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)
 - a. **S2.054** may consume only **#2 fuel oil**.
 - b. The maximum allowable fuel consumption rate for **S2.054** shall not exceed **64.71** gallons per hour, averaged over a calendar day.
 - c. The maximum allowable throughput rate for **S2.050 through S2.053, each**, shall not exceed **55.0** tons of **calcium**, **alumina, iron, silica** per hour, averaged over a calendar day.
 - d. <u>Hours</u>
 - (1) **S2.050 through S2.054, each,** may operate a total of **24** hours per day.
 - (2) **S2.050 through S2.054, each**, may operate a total of **3,000** hours per 12-month rolling period.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **6.00** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **6.00** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.56** pounds per hour, nor more than **2.34** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.46** pounds per hour, nor more than **0.72** tons per 12-month rolling period.
- e. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.74** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of Baghouse (DC-1914) shall not equal or exceed 20 percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

X. Emission Units S2.050 through S2.054 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-1914**) the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of PM_{10} to the atmosphere from S2.054 shall not exceed 0.60 pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.054** shall not exceed **6.34** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.051 through S2.053, each**, shall not exceed **45.5** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. <u>#2 Fuel Oil</u>
 - (1) Monitor and record the consumption rate of **#2 fuel oil** for each calendar day for **S2.054** (in **gallons**) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in gallons per hour) for **S2.054** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Calcium, alumina, iron, silica</u>
 - (1) Monitor and record the throughput for **S2.050 through S2.053, each**, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.050 through S2.053, each,** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.050 through S2.054, each**, for each calendar day.
- d. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.050 through S2.054** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.050 through S2.054** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

X. Emission Units S2.050 through S2.054 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days of the exceedance of 50 hours and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.

6. Federal Requirements

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart LLL – Portland Cement Manufacturing Industry

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in Section V

of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

Y. Emission Units S2.050 through S2.054

System 12A – #2 Raw Mill System – Used as Finish Mill (Primary Operating Scenario –		Location UTM (Zone 11, NAD 83)	
	Natural Gas)	m North	m East
S2.050	Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912 transfer to Screw Conveyor 1913 to Bucket Elevator 1908 is 100% Fully Enclosed]	4,388,084	305,800
S2.051	Screw Conveyor 1916 transfer to Air Slide 1917		
S2.052	Air Separator 1910 transfer to Air Slide 1917		
S2.053	Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw Conveyor 1914-3 to Screw Conveyor 1914-4 to Baghouse (DC-1914) is 100% Fully Enclosed]		
S2.054	Heater 1909 (14 MMBtu/hr Natural Gas)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from **S2.050 through S2.054** shall be controlled by **Baghouse (DC-1914)**.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 44.0 feet Stack Diameter: 2.3 feet Stack Temperature: 180 °F Exhaust Flow: 10,200.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. **S2.054** may consume only **natural gas**.
 - b. The maximum allowable throughput rate for **S2.050 through S2.053, each**, shall not exceed **40.0** tons of **calcium**, **alumina, iron, silica, gypsum, pozzolan, clinker** per hour, averaged over a calendar day.
 - Descriptive Operating Parameters, S2.054
 - (1) Heat Input rate: 14 MMBtu per hour
 - (2) Maximum Fuel Consumption Rate: 13,461.5 standard cubic feet (scf) per hour
 - Hours

c.

d.

(1) **S2.050 through S2.054, each,** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.56** pounds per hour, nor more than **6.82** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.46** pounds per hour, nor more than **0.72** tons per 12-month rolling period.
- e. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.74** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of Baghouse (DC-1914) shall not equal or exceed 20 percent.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

Y. Emission Units S2.050 through S2.054 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of PM_{10} to the atmosphere from S2.054 shall not exceed 0.55 pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.054** shall not exceed **9.80** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.051 through S2.053, each**, shall not exceed **42.5** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. <u>Natural Gas</u>
 - (1) Maintain purchase records of natural gas to determine fuel consumption rate for **S2.054** for each calendar month.
- b. <u>Calcium, alumina, iron, silica, gypsum, pozzolan, clinker</u>
 - (1) Monitor and record the throughput for **S2.050 through S2.053**, each, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.050 through S2.053, each,** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.050 through S2.054, each,** for each calendar day.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.050 through S2.054** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.050 through S2.054** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

Y. Emission Units S2.050 through S2.054 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

Z. Emission Units S2.050 through S2.054

System 12	System 12A – #2 Raw Mill System – Used as Finish Mill (Alternate Operating Scenario – Location UTM (Zone 11, NAD 8)		
	#2 Fuel Oil)	m North	m East
S2.050	Bucket Elevator 1908 transfer to Air Separator 1910 [Screw Conveyor 1912 transfer to Screw Conveyor 1913 to Bucket Elevator 1908 is 100% Fully Enclosed]		
S2.051	Screw Conveyor 1916 transfer to Air Slide 1917		
S2.052	Air Separator 1910 transfer to Air Slide 1917	4 200 00 4	305.800
S2.053	Air Slide 1917 transfer to Pump 213 [Baghouse (DC-1914-2) transfer to Screw Conveyor 1914-3 to Screw Conveyor 1914-4 to Baghouse (DC-1914) is 100% Fully Enclosed]	4,388,084	505,800
S2.054	Heater 1909 (9.06 MMBtu/hr #2 Fuel Oil)		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from **S2.050 through S2.054** shall be controlled by **Baghouse (DC-1914)**.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 44.0 feet Stack Diameter: 2.3 feet Stack Temperature: 180 °F Exhaust Flow: 10,200.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)
 - a. **S2.054** may consume only **#2 fuel oil**.
 - b. The maximum allowable fuel consumption rate for **S2.054** shall not exceed **64.71** gallons per hour, averaged over a calendar day.
 - c. The maximum allowable throughput rate for **S2.050 through S2.053, each**, shall not exceed **40.0** tons of **calcium**, **alumina, iron, silica, gypsum, pozzolan, clinker** per hour, averaged over a calendar day.
 - d. <u>Hours</u>
 - (1) **S2.050 through S2.054, each,** may operate a total of **24** hours per day.
 - (2) S2.050 through S2.054, each, may operate a total of 3,000 hours per 12-month rolling period.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **6.00** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **6.00** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.56** pounds per hour, nor more than **2.34** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.46** pounds per hour, nor more than **0.72** tons per 12-month rolling period.
- e. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed **1.91** pounds per hour, nor more than **8.38** tons per 12-month rolling period.
- f. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **1.13** pounds per hour, nor more than **3.74** tons per 12-month rolling period.
- g. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.50** pounds per hour, nor more than **2.19** tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the exhaust stack of Baghouse (DC-1914) shall not equal or exceed 20 percent.



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Section IV. Specific Operating Conditions (continued)

Z. Emission Units S2.050 through S2.054 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914)** the following pollutants in excess of the following specified limits: (continued)
 - i. NAC 445B.2203 The maximum allowable discharge of PM_{10} to the atmosphere from S2.054 shall not exceed 0.60 pounds per MMBtu.
 - j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.054** shall not exceed **6.34** pounds per hour.
 - k. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.051 through S2.053, each**, shall not exceed **42.5** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. <u>#2 Fuel Oil</u>
 - (1) Monitor and record the consumption rate of **#2 fuel oil** for each calendar day for **S2.054** (in **gallons**) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in gallons per hour) for **S2.054** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Calcium, alumina, iron, silica, gypsum, pozzolan, clinker</u>
 - (1) Monitor and record the throughput for **S2.050 through S2.053, each,** for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.050 through S2.053, each,** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.050 through S2.054, each**, for each calendar day.
- d. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.050 through S2.054** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.050 through S2.054** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

Z. Emission Units S2.050 through S2.054 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days of the exceedance of 50 hours and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.
- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AA. Emission Unit S2.055

System 13 – #2 Raw Mill	Location UTM (2	Location UTM (Zone 11, NAD 83)		
System 15 – #2 Raw Mill	m North	m East		
S2.055 #2 Raw Mill 1911	4,388,084	305,800		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from **S2.055** shall be controlled by **Baghouse (DC-1914-2)**.
- <u>Descriptive Stack Parameters</u> Stack Height: 32.9 feet Stack Diameter: 2.3 feet Stack Temperature: 180 °F Exhaust Flow: 16,956.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

a. The maximum allowable throughput rate for **S2.055** shall not exceed **55.0** tons of **calcium**, **alumina**, **iron**, **silica**, **gypsum**, **pozzolan**, **clinker** per hour, averaged over a calendar day.

b. <u>Hours</u> (1) **S2.055** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-1914-2)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **3.00** pounds per hour, nor more than **13.1** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **3.00** pounds per hour, nor more than **13.1** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.73** pounds per hour, nor more than **3.18** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-1914-2**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.055** shall not exceed **45.5** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.055** for each calendar day.
- b. Monitor and record the hours of operation for **S2.055** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.055** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.



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Section IV. Specific Operating Conditions (continued)

AA. Emission Unit S2.055 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

f. Inspect the baghouse installed on **S2.055** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Section IV. Specific Operating Conditions (continued)

AA. Emission Unit S2.055 (continued)

6. Federal Requirements

Compliance Assurance Monitoring (CAM) - (40 CFR 64.1, et.seq.)

The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on **S2.055**, as listed in **Table AA -1** below:

Table AA -1: Part 64 CAM Monitoring for the controls on S2.055			
CAM Performance Indicator===> Pressure Drop			
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.		
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.		
Verification of Operational Status Annually.			
Quality Assurance/Quality Control	trol The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.		
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.		
Averaging Periods	Instantaneous reading.		
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.		
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).		
Recordkeeping			



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Section IV. Specific Operating Conditions (continued)

AB. Emission Units S2.056 through S2.059, S2.060A, S2.061, and S2.129

System 14A – #2 Kiln Feed System		Location UTM (Zone 11, NAD 83)	
System 14/	A – #2 Kin Feed System	m North	m East
S2.056	Pump Storage Silos transfer to Kiln Feed Bin 2002		
S2.057	Kiln Feed Bin 2002 transfer to Air Slide 2004		
S2.058	Air Slide 2004 transfer to Bucket Elevator 2005		
S2.059	Bucket Elevator 2005 to Constant Head Feed Screw 2006		
S2.060A	Constant Head Feed Screw 2006 transfer to Kiln Feed Screw 2010	4,387,947	305,797
S2.061	Kiln Feed Screw 2010 transfer to Kiln #2 2013		
	Truck Loadout Spout 2009-3 transfer into Dump Truck [Dust Tank (S2.067)		
S2.129	transfer to Screw Conveyor 2009-2 to Truck Loading Spout 2009-3 is 100% Fully		
	Enclosed]		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from S2.056 through S2.059, S2.060A, S2.061, and S2.129 shall be controlled by Baghouse (DC-2001).
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 65.0 feet Stack Diameter: 1.00 feet Stack Temperature: 180 °F Exhaust Flow: 3,478.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **S2.056 through S2.059**, **S2.060A**, and **2.061**, each, shall not exceed **47.0** tons of **kiln feed** per hour, averaged over a calendar day.
 - b. The maximum allowable throughput rate for **S2.129** shall not exceed **70.0** tons of **cement kiln dust** per hour, averaged over a calendar day, nor more than **210,000.0** tons per 12-month rolling period.
 - c. <u>Hours</u>
 - (1) **S2.056 through S2.059, S2.060A, S2.061, each**, may operate a total of **24** hours per day.
 - (2) **S2.129** may operate a total of **8** hours per day.
 - (3) **S2.129** may operate a total of **3,000** hours per 12-month rolling period.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-2001)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.72** pounds per hour, nor more than **3.15** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.72 pounds per hour, nor more than 3.15 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.29** pounds per hour, nor more than **1.26** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-2001**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of PM₁₀ to the atmosphere from S2.056 through S2.059, S2.060A, and S2.061, each, shall not exceed 44.0 pounds per hour.
- f. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.129** shall not exceed **47.8** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

AB. Emission Units S2.056 through S2.059, S2.060A, S2.061, and S2.129

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- a. Monitor and record the throughput for S2.056 through S2.059, S2.060A, S2.061, and S2.129, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.056 through S2.059**, **S2.060A**, **S2.061**, **and S2.129**, **each**, for each calendar day.
- c. Record the monthly hours of operation for **S2.129** and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- d. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- e. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- f. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **System 14A** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- g. Inspect the baghouse installed on **System 14A** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AC. Emission Unit S2.060B

System 14D #2 Kiln Food System	Location UTM (Zone 11, NAD	
System 14B – #2 Kiln Feed System	m North	m East
S2.060B Constant Head Feed Screw 2006	4,387,948	305,794

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

a. Emissions from **S2.060B** shall be controlled by a **Bin Vent Filter**.

 b. <u>Descriptive Stack Parameters</u> Stack Height: 57.0 feet Stack Diameter: 0.7 feet Stack Temperature: 150 °F Exhaust Flow: 295.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

a. The maximum allowable throughput rate for **S2.060B** shall not exceed **47.0** tons of **kiln feed** per hour, averaged over a calendar day.

b. <u>Hours</u> (1) **S2.060B** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **Bin Vent Filter** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.0069** pounds per hour, nor more than **0.030** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.0069 pounds per hour, nor more than 0.030 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.0069** pounds per hour, nor more than **0.030** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of the **Bin Vent Filter** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.060B** shall not exceed **44.0** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.060B** for each calendar day.
- b. Monitor and record the hours of operation for **S2.060B** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the bin vent on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the monthly visible emissions, and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AC. Emission Unit S2.060B (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

f. Inspect the bin vent installed on **S2.060B** on a **monthly** basis in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AD. Emission Units S2.062 through S2.067 and S2.127

System 15 #2 Kiln Circuit (Drimony Operating Secondria Cool or Cool/Cake Bland)		Location UTM (Zone 11, NAD 83)	
System 15	System 15 – #2 Kiln Circuit (Primary Operating Scenario - Coal or Coal/Coke Blend)		m East
S2.062	Kiln #2 2013 [Fluidized Coke Silo Loading and Unloading is 100% Fully		
52.002	Enclosed]		
S2.063	Coal Mill 2043	1	
S2.064	Baghouse Screw Conveyors to Screw Conveyor 9085		
S2.065	Screw Conveyor 9085 transfer to Bucket Elevator 2010-1	4 297 022 205 90	
S2.066	Bucket Elevator 2010-1 transfer to Screw 2009 and Dust Tank [Bucket Elevator	4,387,922	305,803
32.000	2010-1 transfer to Kiln Feed Bin 2002 is 100% Fully Enclosed]		
S2.067	Dust Tank to Weigh Screw 2009-14 [Weigh Screw 2009-14 transfer to Rotary		
52.007	Feeders 2009-16 and 2009-18 to Finish Mills #2 or #3 is 100% Fully Enclosed]		
S2.127	Portable Lime Tank for Kiln #2 2013		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- Emissions from **S2.062 through S2.067 and S2.127** shall be controlled by the following:
- (1) **Baghouse (DC-9109)** for the control of particulate matter.
- (2) Selective Non-Catalytic Reduction (SNCR) for the control of oxides of nitrogen. The SNCR shall utilize ammonia injection into the SNCR.
- <u>Descriptive Stack Parameters</u> Stack Height: 80.0 feet Stack Diameter: 6.75 feet Stack Temperature: 295 °F Exhaust Flow: 56,208 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. The maximum allowable fuel feed rate for **S2.063** shall not exceed **7.5** tons **coal or coal/coke blend** per clock hour.
- b. The maximum allowable fuel consumption rate for **S2.062** shall not exceed **178,840.0** standard cubic feet (scf) of **natural gas** per clock hour.

c. The **#2 Kiln Circuit** may consume the following fuels under the following conditions:

- (1) 100% coal or a combination of coal, coke, and natural gas may be consumed at all times.
- (2) **Non-hazardous used oils and greases** generated solely by the facility may be consumed at a maximum feed rate not to exceed **5.0** gallons per clock hour.
- (3) Non-hazardous hydrocarbon contaminated soils generated solely by the facility may be consumed at a maximum feed rate not to exceed 2.5 tons per clock hour.
- d. The maximum allowable production rate for **System 15** shall not exceed **30.55** tons of **clinker** per hour, averaged over a calendar day.
- e. The maximum allowable throughput rate for **S2.127** shall not exceed **1.50** tons of **lime** per hour, averaged over a calendar day, nor more than **13,140.0** tons per 12-month rolling period.
- f. <u>Hours</u>

a.

(1) **S2.062 through S2.067 and S2.127, each**, may operate a total of **24** hours per day.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AD. Emission Units S2.062 through S2.067 and S2.127 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-9109**) the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 14.8 pounds per hour, nor more than 65.0 tons per 12-month rolling period.
 - c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - d. The discharge of SO_2 (sulfur dioxide) to the atmosphere shall not exceed 42.9 pounds per hour, nor more than 187.9 tons per 12-month rolling period.
 - e. Consent Decree Limit The discharge of **SO**₂ to the atmosphere shall not exceed **1.10** pounds per ton of clinker produced, based on a 30-day rolling average.
 - f. The discharge of **NO**_X (oxides of nitrogen) to the atmosphere shall not exceed **475.8** pounds per hour, nor more than **2,084.2** tons per 12-month rolling period.
 - g. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **36.4** pounds per hour, nor more than **159.3** tons per 12-month rolling period.
 - h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **16.1** pounds per hour, nor more than **70.4** tons per 12-month rolling period.
 - i. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse (DC-9109)** shall not equal or exceed **20** percent.
 - j. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.062** shall not exceed **0.31** pounds per MMBtu.
 - k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.062** shall not exceed **130.2** pounds per hour.
 - 1. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from S2.062 through S2.067, each, shall not exceed 40.1 pounds per hour.
 - m. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.127** shall not exceed **5.38** pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the hours of operation for **S2.062 through S2.067 and S2.127 (each)** for each clock hour.
- b. <u>Coal or Coal/Coke Blend</u>
 - (1) Monitor and record the feed rate of **coal or coal/coke blend** (in tons) for each clock hour **S2.063** by use of a weigh belt.
 - (2) Record the feed rates of **coal or coal/coke blend** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Conduct and record an ASTM Method D5865 to determine heat content of the coal or coke for **S2.063** for each delivery.
 - (4) Conduct and record Method 19 to determine the SO₂ emission rate of the coal or coal/coke feed on a **quarterly** basis.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AD. Emission Units S2.062 through S2.067 and S2.127 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- c. Non-Hazardous Used Oils and Greases
 - (1) Monitor and record the feed rate of **non-hazardous used oils and greases** (in gallons) for each clock hour for **S2.063** by use of a fuel pump rate.
 - (2) Record the feed rates of **non-hazardous used oils and greases** (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the test results verifying non-hazardous conditions of the used oils and greases. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the used oils and greases meeting the standards set forth in 40 CFR 279.11.
- d. Non-Hazardous Hydrocarbon Contaminated Soils
 - (1) Monitor and record the feed rate of **non-hazardous hydrocarbon contaminated soils** (in tons) for each clock hour for **S2.063** by use of a weigh feeder system.
 - (2) Record the feed rates of **non-hazardous hydrocarbon contaminated soils** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the amount of hydrocarbon contaminated soils processed and location of hydrocarbon contaminated soils generated.
 - (4) Monitor and record the test results verifying non-hazardous conditions of the hydrocarbon contaminated soils. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the hydrocarbon contaminated soils meeting the standards set forth in 40 CFR 279.11.
- e. <u>Natural Gas</u>
 - (1) Monitor and record the consumption rate of **natural gas** (in scf) for each clock hour for **S2.063** by use of a fuel flow meter.
 - (2) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- f. <u>Clinker</u>
 - (1) Monitor and record the production rate for **System 15** for each calendar day.
 - (2) Record the average hourly production rate (in tons per hour) for **System 15** using the total daily production rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- g. <u>Lime</u>
 - (1) Monitor and record the throughput for **S2.127** for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.127** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- h. Inspect the baghouse installed on **S2.062 through S2.067 and S2.127** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- i. Inspect the SNCR installed on **S2.062 through S2.067 and S2.127** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results, and any corrective actions taken.
- j. Calibrate, operate, and maintain a Continuous Opacity Monitoring System (COMS) to continuously measure and record the opacity (in percent opacity). The COMS shall continuously measure the opacity in accordance with the manufacturer's specifications and the requirements set forth in **Section VIII** of this operating permit. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

AD. Emission Units S2.062 through S2.067 and S2.127 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the anniversary date of the previous initial performance testing or annual performance testing, and annually thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- g. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- h. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.

6. <u>Federal Requirements</u>

- a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u> The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in Section V of this operating permit.
- b. Continuous Emissions Monitoring System (CEMS) 40 CFR Part 60
 - (1) The Permittee, upon issuance of this operating permit, shall comply with the SO₂ and NO_X CEMS requirements set forth in **Section VII** of this operating permit.
 - (2) The Permittee, upon issuance of this operating permit, shall comply with the THC CEMS requirements set forth in 40 CFR 63.1350(i) of Subpart LLL.
- c. <u>United States EPA Consent Decree</u> The Permittee, upon issuance of this operating permit, shall comply with the Consent Decree requirements set forth in **Section X** of this operating permit.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AE. Emission Units S2.062 through S2.067 and S2.127

System 15A – #2 Kiln Circuit (Alternate Operating Scenario – Natural Gas)		Location UTM (Zone 11, NAD 83)	
System 15	5A – #2 Kim Circuit (Alternate Operating Scenario – Natural Gas)	m North	m East
S2.062	Kiln #2 2013 [Fluidized Coke Silo Loading and Unloading is 100% Fully		
32.002	Enclosed]		
S2.063	Coal Mill 2043		
S2.064 Baghouse Screw Conveyors to Screw Conveyor 9085			
S2.065	Screw Conveyor 9085 transfer to Bucket Elevator 2010-1		
S2.066	Bucket Elevator 2010-1 transfer to Screw 2009 and Dust Tank [Bucket Elevator	4,387,922	305,803
52.000	2010-1 transfer to Kiln Feed Bin 2002 is 100% Fully Enclosed]		
S2.067	Dust Tank to Weigh Screw 2009-14 [Weigh Screw 2009-14 transfer to Rotary		
32.007	Feeders 2009-16 and 2009-18 to Finish Mills #2 or #3 is 100% Fully Enclosed]		
S2.127	Portable Lime Tank for Kiln #2 2013		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- Emissions from **S2.062 through S2.067 and S2.127** shall be controlled by the following:
- (1) **Baghouse (DC-9109)** for the control of particulate matter.
- (2) Selective Non-Catalytic Reduction (SNCR) for the control of oxides of nitrogen. The SNCR shall utilize ammonia injection into the SNCR.
- b. <u>Descriptive Stack Parameters</u> Stack Height: 80.0 feet Stack Diameter: 6.75 feet Stack Temperature: 295 °F Exhaust Flow: 56,208 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. **S2.062** may consume only **natural gas**.
- b. The maximum allowable fuel consumption rate for **S2.062** shall not exceed **178,840.0** standard cubic feet (scf) of **natural gas** per clock hour.
- c. The maximum allowable production rate for **System 15A**, shall not exceed **30.55** tons of **clinker** per hour, averaged over a calendar day.
- d. The maximum allowable throughput rate for **S2.127** shall not exceed **1.50** tons of **lime** per hour, averaged over a calendar day, nor more than **13,140.0** tons per 12-month rolling period.
- e. <u>Hours</u>

a.

(1) S2.062 through S2.067 and S2.127, each, may operate a total of 24 hours per day.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AE. Emission Units S2.062 through S2.067 and S2.127 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-9109**) the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 14.8 pounds per hour, nor more than 65.0 tons per 12-month rolling period.
 - c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **14.8** pounds per hour, nor more than **65.0** tons per 12-month rolling period.
 - d. The discharge of SO_2 (sulfur dioxide) to the atmosphere shall not exceed 42.9 pounds per hour, nor more than 187.9 tons per 12-month rolling period.
 - e. Consent Decree Limit The discharge of **SO**₂ to the atmosphere shall not exceed **1.10** pounds per ton of clinker produced, based on a 30-day rolling average.
 - f. The discharge of **NO**_X (oxides of nitrogen) to the atmosphere shall not exceed **475.8** pounds per hour, nor more than **2,084.2** tons per 12-month rolling period.
 - g. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **36.4** pounds per hour, nor more than **159.3** tons per 12-month rolling period.
 - h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **16.1** pounds per hour, nor more than **70.4** tons per 12-month rolling period.
 - i. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse (DC-9109)** shall not equal or exceed **20** percent.
 - j. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.062** shall not exceed **0.31** pounds per MMBtu.
 - k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.062** shall not exceed **130.2** pounds per hour.
 - 1. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from S2.063 through S2.067, each, shall not exceed 40.1 pounds per hour.
 - m. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from S2.127 shall not exceed 5.38 pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the hours of operation for **S2.062 through S2.067 and S2.127, each**, for each clock hour.
- b. <u>Natural Gas</u>
 - (1) Monitor and record the consumption rate of **natural gas** (in scf) for each clock hour for **S2.063** by use of a fuel flow meter.
 - (2) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- c. <u>Clinker</u>
 - (1) Monitor and record the production rate of **clinker** for **System 15A**, for each calendar day.
 - (2) Record the average hourly production rate (in tons per hour) for **System 15A** using the total daily production rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.



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Section IV. Specific Operating Conditions (continued)

AE. Emission Units S2.062 through S2.067 and S2.127 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- d. <u>Lime</u>
 - (1) Monitor and record the throughput for **S2.127** for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.127** using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Inspect the baghouse installed on **S2.062 through S2.067 and S2.127** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- f. Inspect the SNCR installed on **S2.062 through S2.067 and S2.127** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results, and any corrective actions taken.
- g. Calibrate, operate, and maintain a Continuous Opacity Monitoring System (COMS) to continuously measure and record the opacity (in percent opacity). The COMS shall continuously measure the opacity in accordance with the manufacturer's specifications and the requirements set forth in **Section VIII** of this operating permit. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the exceedance of 50 hours, and annually thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- g. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- h. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.



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Section IV. Specific Operating Conditions (continued)

AE. Emission Units S2.062 through S2.067 and S2.127 (continued)

- 6. <u>Federal Requirements</u>
 - a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u>

The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in **Section V** of this operating permit.

- b. <u>Continuous Emissions Monitoring System (CEMS) 40 CFR Part 60</u>
 - (1) The Permittee, upon issuance of this operating permit, shall comply with the SO₂ and NO_X, CEMS requirements set forth in **Section VII** of this operating permit.
 - (2) The Permittee, upon issuance of this operating permit, shall comply with the THC CEMS requirements set forth in 40 CFR 63.1350(i) of Subpart LLL.
- c. <u>United States EPA Consent Decree</u> The Permittee, upon issuance of this operating permit, shall comply with the Consent Decree requirements set forth in **Section X** of this operating permit.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127

System 15	System 15B – #2 Kiln Circuit (Alternate Operating Scenario – Coal or Coal/coke Blend, Location UTM (Zone 11, NAD		
	Carpet)	m North	m East
S2.062	Kiln #2 2013 [Fluidized Coke Silo Loading and Unloading is 100% Fully Enclosed]	ling is 100% Fully	
S2.063	Coal Mill 2043		
S2.064	Baghouse Screw Conveyors to Screw Conveyor 9085		
S2.065	Screw Conveyor 9085 transfer to Bucket Elevator 2010-1		
S2.066	Bucket Elevator 2010-1 transfer to Screw 2009 and Dust Tank [Bucket Elevator 2010-1 transfer to Kiln Feed Bin 2002 is 100% Fully Enclosed]		
S2.067	Dust Tank to Weigh Screw 2009-14 [Weigh Screw 2009-14 transfer to Rotary Feeders 2009-16 and 2009-18 to Finish Mills #2 or #3 is 100% Fully Enclosed]	4,387,922	305,803
S2.127	Portable Lime Tank for Kiln #2 2013		
S2.118	Material transfer to Receiving Bins		
S2.119	Receiving Bin transfer to Belt Conveyors		
S2.120	Belt Conveyors transfer to Incline Belt to Feed Hopper		
S2.121	Feed Hopper transfer to Material Weigher		
S2.122	Material Weigher to Material Handling Fan		
S2.123	Material Handling Fan through Duct to Kiln #2 Burner		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- Emissions from S2.062 through S2.067, S2.118 through S2.123, and S2.127 shall be controlled by the following:
- (1) **Baghouse (DC-9109)** for the control of particulate matter.
- (2) Selective Non-Catalytic Reduction (SNCR) for the control of oxides of nitrogen. The SNCR shall utilize ammonia injection into the SNCR.
- b. <u>Descriptive Stack Parameters</u> Stack Height: 80.0 feet Stack Diameter: 6.75 feet Stack Temperature: 295 °F Exhaust Flow: 56,208 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

a.

- a. The maximum allowable fuel feed rate for **S2.063** shall not exceed **7.5** tons of **coal or coal/coke blend** per clock hour.
- b. The maximum allowable fuel consumption rate for **S2.062** shall not exceed **178,840.0** standard cubic feet (scf) of **natural gas** per clock hour.
- c. The maximum allowable feed rate for **S2.123** shall not exceed **2.5** tons of **post-consumer carpet** per clock hour.
- d. The **post-consumer carpet** shall meet the definition of solid waste as define in 40 CFR Part 241.2.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127 (continued)

- 2. <u>Operating Parameters</u> (NAC 445B.3405) (continued)
 - e. OPTC AP3241-3431, Air Case 7770 The **post-consumer carpet** shall meet the following specifications:

Table IV-1: Post-Consumer Carpet Specifications					
Test Parameter	Test Method	Test Description	Initial Value	Upper Limit	Lower Limit
Btu/lb	ASTM D5865	Average Heating Value	9,049	TBD	TBD
	ASTM D5142	Moisture, wt%	0.44	TBD	TBD
	ASTM D5142	Ash, wt%	9.14	TBD	TBD
Proximate Analysis	ASTM D5142	Volatile Matter, wt%	81.50	TBD	TBD
	ASTM D5142	Fixed Carbon, wt%	8.92	TBD	TBD
	ASTM D5142	Total	100.00	TBD	TBD
	ASTM D3176	Moisture, wt%	0.44	TBD	TBD
	ASTM D5142/5373	Ash, wt%	9.14	TBD	TBD
	ASTM D5142/5373	Carbon, wt%	59.60	TBD	TBD
T T14:	ASTM D5142/5373	Hydrogen, wt%	4.35	TBD	TBD
Ultimate Analysis	ASTM D5142/5373	Nitrogen, wt%	0.59	TBD	TBD
	ASTM D5142/5373	Sulfur, wt%	0.10	TBD	TBD
	ASTM D5142/5373	Oxygen, wt%	25.78	TBD	TBD
	ASTM D5142/5373	Total	100.00	TBD	TBD
Total Chlorine	ASTM D4208		TBD	TBD	TBD
Total Hydrocarbons	ASTM D4208	For Range C8 to C40	TBD	TBD	TBD
Metals by ICP	EPA SW846 6010	As, Be, Cd, Cr, Pb, Mn, Ni, Se	TBD	TBD	TBD
Total Mercury	EPA SW846 7471		TBD	TBD	TBD

- f. The **#1 Kiln Circuit** may consume the following fuels under the following conditions:
 - (1) **Post-consumer carpet** may be consumed at a maximum feed rate of **2.5** tons per clock hour and up to of **7.50** tons per clock hour of **coal or coal/coke blend**. The post-consumer carpet will meet the definition of solid waste as defined in 40 CFR Part 241.2.
 - (2) Natural gas may be consumed with the coal or coal/coke blend.
 - (3) **Non-hazardous used oils and greases** generated solely by the facility may be consumed at a maximum feed rate not to exceed **5.0** gallons per clock hour.
 - (4) Non-hazardous hydrocarbon contaminated soils generated solely by the facility may be consumed at a maximum feed rate not to exceed 2.5 tons per clock hour.
- g. The maximum allowable production rate for **System 15B** shall not exceed **30.55** tons of **clinker** per hour, averaged over a calendar day.
- h. The maximum allowable throughput rate for **S2.127** shall not exceed **1.50** tons of **lime** per hour, averaged over a calendar day, nor more than **13,140.0** tons per 12-month rolling period.
- i. <u>Hours</u>
 - (1) **S2.062 through S2.067, S2.118 through S2.123, and S2.127, each**, may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-9109)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **2.84** pounds per hour, nor more than **12.5** tons per 12-month rolling period.
- b. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **PM** to the atmosphere shall not exceed **13.5** milligrams per dry standard cubic meter.
- c. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **2.84** pounds per hour, nor more than **12.5** tons per 12-month rolling period.
- d. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **2.84** pounds per hour, nor more than **12.5** tons per 12-month rolling period.



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Section IV. <u>Specific Operating Conditions</u> (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127 (continued)

- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) (continued) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse** (**DC-9109**) the following pollutants in excess of the following specified limits: (continued)
 - e. The discharge of SO_2 (sulfur dioxide) to the atmosphere shall not exceed 42.9 pounds per hour, nor more than 187.9 tons per 12-month rolling period.
 - f. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **SO**₂ to the atmosphere shall not exceed **600.0** parts per million by volume.
 - g. Consent Decree Limit The discharge of **SO**₂ to the atmosphere shall not exceed **1.10** pounds per ton of clinker produced, based on a 30-day rolling average.
 - h. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed 257.5 pounds per hour, nor more than 1,127.7 tons per 12-month rolling period.
 - i. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **NO**_X to the atmosphere shall not exceed **630.0** parts per million by volume.
 - j. The discharge of **CO** (carbon monoxide) to the atmosphere shall not exceed **196.5** pounds per hour, nor more than **860.8** tons per 12-month rolling period.
 - k. 40 CFR Part 62 Subpart IIIa, Table 6 The discharge of **CO** to the atmosphere shall not exceed **790.0** parts per million by volume.
 - 1. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **11.7** pounds per hour, nor more than **51.1** tons per 12-month rolling period.
 - m. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse (DC-9109)** shall not equal or exceed **20** percent.
 - n. NAC 445B.2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.062** shall not exceed **0.31** pounds per MMBtu.
 - o. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.062** shall not exceed **130.2** pounds per hour.
 - p. NAC 445B.22033 The maximum allowable discharge of PM₁₀ to the atmosphere from S2.063 through S2.067 and S2.118 through S2.123, each, shall not exceed 40.1 pounds per hour.
 - q. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.127** shall not exceed **5.38** pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the hours of operation for S2.062 through S2.067, S2.118 through S2.123, and S2.127, each, for each clock hour.
- b. <u>Coal or Coal/Coke Blend</u>
 - (1) Monitor and record the feed rate of **coal or coal/coke blend** (in tons) for each clock hour for **S2.063** by use of a weigh belt.
 - (2) Record the feed rates of **coal or coal/coke blend** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Conduct and record an ASTM Method D5865 to determine heat content of the coal or coke for each delivery.



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Section IV. <u>Specific Operating Conditions</u> (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- c. <u>Post-Consumer Carpet</u> OPTC AP3241-3431, Air Case 7770
 - (1) Monitor and record the feed rate of **post-consumer carpet** (in tons) for each clock hour for **S2.118 through S2.123, each**.by use of a weigh feeder system.
 - (2) Record the feed rates of **post-consumer carpet** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Conduct and record an ASTM D5865 to determine the average heating value (Btu) on a **quarterly** basis.
 - (4) Conduct and record an ASTM Methods D5142 (Proximate) and D3176 (Ultimate) to determine moisture content, ash content, volatile matter, fixed carbon content, carbon, hydrogen, nitrogen, sulfur, and oxygen (proximate and ultimate analysis) on a **quarterly** basis.
 - (5) Conduct and record an ASTM Method D4208 to determine the total chlorine and total hydrocarbons on a **quarterly** basis.
 - (6) Conduct and record an EPA Test Methods SW846 6010 and 7471 (Mercury Only) to determine metals content (As, Be, Cd, Cr, Pb, Mn, Ni, Se and total Hg) on an **annual** basis.
- d. Non-Hazardous Used Oils and Greases
 - (1) Monitor and record the feed rate of **non-hazardous used oils and greases** (in gallons) for each clock hour for **S2.063** by use of a fuel pump rate.
 - (2) Record the feed rates of **non-hazardous used oils and greases** (in gallons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the test results verifying non-hazardous conditions of the used oils and greases. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the used oils and greases meeting the standards set forth in 40 CFR 279.11.
- e. <u>Non-Hazardous Hydrocarbon Contaminated Soils</u>
 - (1) Monitor and record the feed rate of **non-hazardous hydrocarbon contaminated soils** (in tons) for each clock hour for **S2.063** by use of a weigh feeder system.
 - (2) Record the feed rates of **non-hazardous hydrocarbon contaminated soils** (in tons) on a cumulative monthly basis, for each 12-month rolling period.
 - (3) Monitor and record the amount of hydrocarbon contaminated soils processed and location of hydrocarbon contaminated soils generated.
 - (4) Monitor and record the test results verifying non-hazardous conditions of the hydrocarbon contaminated soils. The Permittee must utilize U.S. EPA approved test methods to determine non-hazardous conditions of the hydrocarbon contaminated soils meeting the standards set forth in 40 CFR 279.11.
- f. Natural Gas
 - (1) Monitor and record the consumption rate of **natural gas** (in scf) for each clock hour for **S2.063** by use of a fuel flow meter.
 - (2) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- g. <u>Clinker</u>
 - (1) Monitor and record the production rate for **System 15B** for each calendar day.
 - (2) Record the average hourly production rate (in tons per hour) for **System 15B** using the total daily production rate and total daily hours of operation.
 - (3) Record the production rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- h. Inspect the baghouse installed on **S2.062 through S2.067**, **S2.118 through S2.123**, and **S2.127** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



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Section IV. Specific Operating Conditions (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- i. Inspect the SNCR installed on **S2.062 through S2.067 and S2.127** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results, and any corrective actions taken.
- j. Calibrate, operate, and maintain a Continuous Opacity Monitoring System (COMS) to continuously measure and record the opacity (in percent opacity). The COMS shall continuously measure the opacity in accordance with the manufacturer's specifications and the requirements set forth in **Section VIII** of this operating permit. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.
- k. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 1. <u>Compliance with the Projected Actual Emissions (PAE)</u> OPTC AP3241-3431, Air Case 7770
 - (1) The Permittee shall demonstrate compliance with the Projected Actual Emissions (PAE) by reporting the actual 12-month rolling period emissions on a **quarterly** basis, commencing with the first quarter following June 2016. The Permittee shall comply with the following PAE limits:
 - (a) PM 45.2 tons per 12-month rolling period.
 - (b) $PM_{10} 40.2$ tons per 12-month rolling period.
 - (c) $PM_{2.5}-37.7$ tons per 12-month rolling period.
 - (d) $NO_X 1,632.2$ tons per 12-month rolling period.
 - (e) CO 154.3 tons per 12-month rolling period.
 - (f) $SO_2 95.6$ tons per 12-month rolling period.
 - (g) VOC 55.0 tons per 12-month rolling period.
 - (h) Lead (Pb) 0.29 tons per 12-month rolling period.
 - (i) Fluoride (F) 1.37 tons per 12-month rolling period.
 - (2) If the 12-month rolling period emissions exceed the limit specified in above, the Permittee is also required to provide justification in the report that the revision was not a Prevention of Significant Deterioration (PSD) Major Modification.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of the exceedance of 50 hours, and annually thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.



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Section IV. <u>Specific Operating Conditions</u> (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127 (continued)

- 5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1)) (continued) The Permittee, upon issuance of this operating permit, shall conduct and record annual performance testing within 90 days of
 - the exceedance of 50 hours, and annually thereafter, in accordance with the following: (continued)
 f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
 - g. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.
- 6. <u>Federal Requirements</u>
 - a. <u>Federal Plan Requirements 40 CFR Part 62 Subpart IIIa Commercial and Industrial Solid Waste Incineration</u> <u>Units</u>

The Permittee, upon issuance of this operating permit or 30 days after the date of publication in the Federal Register, whichever date comes first, shall comply with Subpart IIIa requirements set forth in **Section VI** of this operating permit.

- b. <u>Continuous Emissions Monitoring System (CEMS) 40 CFR Part 60</u> The Permittee, upon issuance of this operating permit, shall comply with the SO₂, NO_X, CO and HCl CEMS requirements set forth in **Section VII** of this operating permit.
- <u>Continuous Opacity Monitoring System (COMS)</u>
 The Permittee, upon issuance of this operating permit, shall comply with the COMS requirements set forth in Section VIII of this operating permit.
- d. <u>Prevent of Significant Deterioration of Air Quality (PSD) 40 CFR Part 52.21</u> The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.
- e. <u>United States EPA Consent Decree</u> The Permittee, upon issuance of this operating permit, shall comply with the Consent Decree requirements set forth in **Section X** of this operating permit.



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Nevada Department of Conservation and Natural Resources • Division of Environmental Protection Bureau of Air Pollution Control

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Section IV. Specific Operating Conditions (continued)

AF. Emission Units S2.062 through S2.067, S2.118 through S2.123, and S2.127 (continued)

6. <u>Federal Requirements</u> (continued)

Compliance Assurance Monitoring (CAM) – (40 CFR 64.1, et.seq.)

The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on S2.062 through S2.067, S2.118 through S2.123, and S2.127, as listed in Table AF -1 below:

Table AF -1: Part 64 CAM Monitoring for the controls on S2.062 through S2.067, S2.118 through S2.123, and S2.127		
CAM Performance Indicator===> Pressure Drop		
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.	
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.	
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.	
Verification of Operational Status	Annually.	
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.	
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.	
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.	
Averaging Periods	Instantaneous reading.	
Operation of Approved Monitoring Permittee shall comply with the applicable provisions of 40 CFR 64.7.		
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).	
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).	



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Section IV. Specific Operating Conditions (continued)

AG. Emission Units S2.068 and S2.069

System 16 – #2 Kiln Clinker Cooler and Reclaim System			Zone 11, NAD 83)
\$2.068	Kiln #2 Clinker Cooler 2017	m North	m East
S2.068			
1.	Air Pollution Control Equipment (NAC 445B.3405) a. Emissions from S2.068 and S2.069 shall be controlled by Baghouse (DC-2 b. Descriptive Stack Parameters Stack Height: 65.0 feet Stack Diameter: 3.94 feet Stack Temperature: 225°F Exhaust Flow: 60,000.0 dry standard cubic feet per minute (dscfm)	2021).	
2.	Operating Parameters (NAC 445B.3405)a.The maximum allowable throughput rate for S2.068 and S2.069, each, sha averaged over a calendar day.b.Hours (1)S2.068 and S2.069, each, may operate a total of 24 hours per day.	ll not exceed 31.0 tons o	of clinker per hour,
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause exhaust stack of Baghouse (DC-2021) the following pollutants in excess of the fola. The discharge of PM (particulate matter) to the atmosphere shall not exceed tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 micror exceed 3.00 pounds per hour, nor more than 13.1 tons per 12-month rolling c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 micror exceed 2.06 pounds per hour, nor more than 9.01 tons per 12-month rolling d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the at shall not exceed 40.2 pounds per hour. 	llowing specified limits d 3.00 pounds per hour, as in diameter) to the at period. as in diameter) to the at period. 2021) shall not equal or	nor more than 13.1 mosphere shall not mosphere shall not exceed 20 percent.
4.	 <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a recordkeeping specified in this section. All records in the log must be identified specified records shall be entered into the log at the end of the shift, end of the day operation for the month, as appropriate. a. Monitor and record the throughput for S2.068 and S2.069, each, for each c b. Monitor and record the hours of operation for S2.068 and S2.069, each, for each c c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly based. 	I with the calendar date y of operation, or the end alendar day. r each calendar day. The average hourly thro ation.	e of the record. All d of the final day of ughput rate shall be



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Section IV. Specific Operating Conditions (continued)

AG. Emission Units S2.068 and S2.069 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.068** and **S2.069** on a weekly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.068 and S2.069** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Section IV. Specific Operating Conditions (continued)

AG. Emission Units S2.068 and S2.069 (continued)

- 6. <u>Federal Requirements</u>
 - a. <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart LLL Portland</u> <u>Cement Manufacturing Industry</u>
 - The Permittee, upon issuance of this operating permit, shall comply with the Subpart LLL requirements set forth in **Section V** of this operating permit.
 - <u>Compliance Assurance Monitoring (CAM) (40 CFR 64.1, et.seq.)</u> The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on **S2.068 and S2.069**, as listed in **Table AG -1** below:

	Table AG -1:
CAM Performance Indicator===>	64 CAM Monitoring for the controls on S2.068 and S2069 Pressure Drop
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.
Verification of Operational Status	Annually.
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.
Averaging Periods	Instantaneous reading.
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).



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Section IV. Specific Operating Conditions (continued)

AH. Emission Units S2.070 through S2.072

System 17	– #2 Kiln Clinker Handling System	Location UTM (Zone 11, NAD 83)				
System 17	- #2 Kini Chiker Handhig System	m North	m East			
	Reclaim Conveyor 2116 transfer to Bucket Elevator 2117 [Baghouse (DC-2021)					
S2.070	transfer to Screw Conveyor 2021-2 to Rotary Feeder 2021-3 to Screw Conveyor 2021-4 to Screw Conveyors 2132 and 2131 to Air Separators 2206-1 and 2206-2 is					
	100% Fully Enclosed]					
S2.071	Drag Chain 2023 transfer to Bucket Elevator 2101-1	4,388,087	305,741			
32.071	Bucket Elevator 2101-1 to Clinker Storage [Baghouse (DC-2102) transfer to	4,388,087	505,741			
	Rotary Feeder 2102-2 to Air Slide Conveyor 2102-4 and Drag Chain Conveyor					
S2.072	2201 to Finish Mill #2; Air Slide Conveyor 2102-4 transfer to Air Separator 2206-					
	2 is 100% Fully Enclosed]					
	· · · · ·					
1.	Air Pollution Control Equipment (NAC 445B.3405)					
	a. Emissions from S2.070 through S2.072 shall be controlled by Baghouse (DC-2102).					
	b. <u>Descriptive Stack Parameters</u>					
	Stack Height: 55.0 feet					
	Stack Diameter: 1.67 feet Stack Temperature: 150°F					
	Exhaust Flow: 4,825.0 dry standard cubic feet per minute (dscfm)					
	Exhaust Flow. 4,825.0 dry standard cubic feet per finnute (dscrift)					
2.	Operating Parameters (NAC 445B.3405)					
	a. The maximum allowable throughput rate for S2.070 shall not exceed 90.0 tons of clinker per hour, averaged over a					
	calendar day.					
	b. The maximum allowable throughput rate for S2.071 and S2.072, each , shall not exceed 31.0 tons of clinker per hour,					
	averaged over a calendar day.					
	c. <u>Hours</u>					
	(1) S2.070 through S2.072, each, may operate a total of 24 hours per day.					
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)					
	The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the					
	exhaust stack of Baghouse (DC-2102) the following pollutants in excess of the following specified limits:					
	a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 1.50 pounds per hour, nor more than 6.57					
	tons per 12-month rolling period.					
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not					
	exceed 1.50 pounds per hour, nor more than 6.57 tons per 12-month rolling period.					
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not					
	exceed 0.30 pounds per hour, nor more than 1.31 tons per 12-month rolling period.					
	d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-2102) shall not equal or exceed 20 percent.					
	e. NAC 445B.22033 – The maximum allowable discharge of PM_{10} to the atmosphere from S2.070 shall not exceed 50.2					
	pounds per hour.		and \$2.0721			
	f. NAC 445B.22033 – The maximum allowable discharge of PM ₁₀ to the atmosphere from S2.071 and S2.072, each,					



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AH. Emission Units S2.070 through S2.072 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.070 through S2.072, each**, for each calendar day.
- b. Monitor and record the hours of operation for **S2.070 through S2.072, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.070 through S2.072** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.070 through S2.072** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AH. Emission Units S2.070 through S2.072 (continued)

6. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

a. <u>Standards</u>

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-2102)** which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c)) Test Methods and Procedures

- b. <u>Test Methods and Procedures</u>
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AI. Emission Units S2.074 through S2.078

System 18 – #2 Finish Mill Systems		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.074	Feed Bins 2201-6 and 2201-7 transfer to #2 Finish Mill 2203-1		
S2.075	#2 Finish Mill 2203-1		
S2.076	Bucket Elevator 2204-1 transfer to Air Slide 2205-1		
S2.077	Air Slide 2205-1 transfer to Air Separator 2206-1	4,388,059	305,739
S2.078	Air Separator 2206-1 transfer to Pump 2212 [Baghouse (DC-2207-1) transfer to		
	Screw Conveyor 2208-1 to Air Slide Conveyor 2217 to Transfer Pump 2212 is		
	100% Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from S2.074 through S2.078 shall be controlled by Baghouse (DC-2207-1).
- <u>Descriptive Stack Parameters</u> Stack Height: 65.0 feet Stack Diameter: 3.0 feet Stack Temperature: 160 °F Exhaust Flow: 30,261.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for S2.074 through S2.078, each, shall not exceed 45.0 tons of clinker, pozzolan, gypsum, limestone, lime, cement kiln dust, slag, fly ash per hour, averaged over a calendar day.
 b. Hours
 - (1) S2.074 through S2.078, each, may operate a total of 24 hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-2207-1)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 1.52 pounds per hour, nor more than 6.65 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-2207-1**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.074 through S2.078, each**, shall not exceed **43.6** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AI. Emission Units S2.074 through S2.078 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.074 through S2.078**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.074 through S2.078, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.074 through S2.078** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.074 through S2.078** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AI. Emission Units S2.074 through S2.078 (continued)

6. Federal Requirements

Compliance Assurance Monitoring (CAM) - (40 CFR 64.1, et.seq.)

The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on **S2.074 through S2.078**, as listed in **Table AI -1** below:

Table AI -1: Part 64 CAM Monitoring for the controls on S2.074 through S2.078				
CAM Performance Indicator===>	Pressure Drop			
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.			
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.			
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.			
Verification of Operational Status	Annually.			
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.			
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.			
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.			
Averaging Periods	Instantaneous reading.			
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.			
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).			
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).			



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AJ. Emission Units S2.073 and S2.079 through S2.084

System 19 – #3 Finish Mill Systems		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.073	Drag Chain 2201 transfer to Feed Bins 2201-6 and 2201-7		
S2.079	Drag Chain 2201 transfer to Feed Bins 2201-8 and 2201-9		
S2.080	Feed Bins 2201-8 and 2201-9 transfer to #3 Finish Mill 2203-2		
S2.081	#3 Finish Mill 2203-2		
S2.082	Bucket Elevator 2204-2 transfer to Screw Conveyor 2205-2	4,388,056	305,730
S2.083	Screw Conveyor 2205-2 transfer to Air Separator 2206-2		
	Air Separator 2206-2 transfer to Pump 2212 [Baghouse (DC-2207-2) transfer to		
S2.084	Screw Conveyor 2208-2 to Air Slide Conveyor 2217 to Transfer Pump 2212 is		
1	100% Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from S2.073 and S2.079 through S2.084 shall be controlled by Baghouse (DC-2207-2).
- b. <u>Descriptive Stack Parameters</u> Stack Height: 65.0 feet Stack Diameter: 3.0 feet Stack Temperature: 160 °F Exhaust Flow: 30,261.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for S2.073 and S2.079, each, shall not exceed 90.0 tons of clinker, pozzolan, gypsum, limestone, cement kiln dust, slag, fly ash per hour, averaged over a calendar day.
 - b. The maximum allowable throughput rate for **S2.080 through S2.084, each**, shall not exceed **45.0** tons of **clinker**, **pozzolan**, **gypsum**, **limestone**, **cement kiln dust**, **slag**, **fly ash** per hour, averaged over a calendar day.
 - c. <u>Hours</u>
 - (1) S2.073 and S2.079 through S2.084, each, may operate a total of 24 hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-2207-2)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **4.00** pounds per hour, nor more than **17.5** tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **1.52** pounds per hour, nor more than **6.65** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-2207-2**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from S2.073 and S2.079, each, shall not exceed 50.2 pounds per hour.
- f. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.080 through S2.084, each**, shall not exceed **43.6** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AJ. Emission Units S2.073 and S2.079 through S2.084 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.073 and S2.079 through S2.084, each**, for each calendar day.
- b. Monitor and record the hours of operation for **S2.073 and S2.079 through S2.084, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.073** and **S2.079 through S2.084** on a weekly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.073 and S2.079 through S2.084** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AJ. Emission Units S2.073 and S2.079 through S2.084 (continued)

6. Federal Requirements

Compliance Assurance Monitoring (CAM) – (40 CFR 64.1, et.seq.)

The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on **S2.073 and S2.079 through S2.084**, as listed in **Table AJ -1** below:

Part 64 CAM	Table AJ -1: Part 64 CAM Monitoring for the controls on S2.073 and S2.079 through S2.084		
CAM Performance Indicator===>	Pressure Drop		
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.		
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.		
Verification of Operational Status	Annually.		
Quality Assurance/Quality Control	The gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.		
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.		
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.		
Averaging Periods	Instantaneous reading.		
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.		
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).		
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).		



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AK. Emission Units PF1.030 and PF1.031

System 104 Finish Mill Food Storage Tenk and Handling (Handling Conveyors)		Location UTM (Zone 11, NAD 83)	
System 19A – Finish Mill Feed Storage Tank and Handling (Handling Conveyors)		m North n	
PF1.030	Gypsum Bin and Transfer Bin transfer to #1 Reclaim Conveyor 2110	4,388,068	305,736
PF1.031	#1 Reclaim Conveyor 2110 transfer to #3 Reclaim Conveyor 2116	4,388,068	305,736
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.030 and PF1.031, each , shall be controlled by a Building End	closure.	
2.	Operating Parameters (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.030 and PF1.031, each, s ash, slag, lime, cement kiln dust, limestone, pozzolan per hour, averaged or b. <u>Hours</u> (1) PF1.030 and PF1.031, each, may operate a total of 24 hours per day.		ons of gypsum, fly
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere froe PF1.030 and PF1.031, each, the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.20 pounds per hour, nor more than 0.4 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall nexceed 0.096 pounds per hour, nor more than 0.42 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall nexceed 0.014 pounds per hour, nor more than 0.063 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from PF1.030 and PF1.031, each, shall not equal or exceed 20 percent. e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere from PF1.030 and PF1.031, each 		
4.	 Monitoring. Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a correcordkeeping specified in this section. All records in the log must be identified specified records shall be entered into the log at the end of the shift, end of the day operation for the month, as appropriate. a. Monitor and record the throughput for PF1.030 and PF1.031, each, for each b. Monitor and record the hours of operation for PF1.030 and PF1.031, each, for each fc. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operated. d. Record the throughput rate of material (in tons) on a cumulative monthly bas e. Conduct and record an observation of visible emissions (excluding water vapor basis while operating. The observer shall stand at a distance sufficient to provide sum oriented to their back. If visible emission test shall be conducted by accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain record keeping: the calendar date of any required monitoring, results of the we actions taken. 	with the calendar date of operation, or the end calendar day. For each calendar day. the average hourly throu- tion. is, for each 12-month r or) on the building enc vide a clear view of the all conduct and record y a certified visible en the acontemporaneous	of the record. Al of the final day of aghput rate shall be colling period. Iosure on a weekly emissions with the a Method 9 visible missions reader in s log the following

f. Inspect the enclosure installed on **PF1.030 and PF1.031** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AK. Emission Units PF1.030 and PF1.031 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. Federal Requirements

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

- a. <u>Standards</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.030 and PF1.031, each,** which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c))
- b. <u>Test Methods and Procedures</u>
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AL. Emission Unit S2.085

System 20 – Cement Storage Silo		Location UTM (Z	one 11, NAD 83) m East	
System 20 - Centert Storage Silo m North S2.085 Transfer to Storage Silo #7 [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed] 4,388,004				
Air Pollution Control Equipmer a. Emissions from S2.085 s b. Descriptive Stack Parame Stack Height: 124.1 feet Stack Diameter: 1.0 feet Stack Temperature: 180	hall be controlled by Baghouse (DC-601) . eters			
 <u>Operating Parameters</u> (NAC 44 a. The maximum allowable averaged over a calendar b. <u>Hours</u> 	5B.3405) throughput rate for S2.085 shall not exceed 387.9 to	ons of cement, gypsun	n, fly ash per hour	
 exhaust stack of Baghouse (DC a. The discharge of PM (pa tons per 12-month rolling b. The discharge of PM₁₀ (exceed 0.61 pounds per 14 c. The discharge of PM_{2.5} (exceed 0.24 pounds per 14 d. NAC 445B.22017 – The 	E this operating permit, shall not discharge or cause the 5-601) the following pollutants in excess of the follow rticulate matter) to the atmosphere shall not exceed the exceed the triculate matter.	wing specified limits: 0.61 pounds per hour, p in diameter) to the atr period. 5 in diameter) to the atr period. 01) shall not equal or e	nor more than 2.63 nosphere shall no nosphere shall no xceed 20 percent.	
recordkeeping specified in this specified records shall be entered operation for the month, as appr a. Monitor and record the th b. Monitor and record the h c. Record the corresponding determined from the tota d. Record the throughput ra e. Conduct and record a M operating. Each Method 9 with 40 CFR Part 60, App	ace of this operating permit, shall maintain, in a consection. All records in the log must be identified we do not the log at the end of the shift, end of the day of	with the calendar date of operation, or the end ne average hourly throu- ion. is, for each 12-month r trolling S2.085 on a v ied visible emissions re oraneous log the follow	of the record. All of the final day o ghput rate shall b olling period. weekly basis while ader in accordance ing recordkeeping	
f. Inspect the baghouse ins	stalled on S2.085 in accordance with the Dust Co rd the results and any corrective actions taken.			



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AM. Emission Units S2.086 through S2.093, S2.093A, and S2.093B

System 21 – Cement Bulk Loading		Location UTM (Zone 11, NAD 83)	
System 21	- Cement Durk Loading	m North	m East
S2.086	Silo transfers to Air Slides		
S2.087	Air Slides transfer to Bucket Elevator 613		305,686
S2.088	Bucket Elevator 613 to Air Slides 609-4 and 701-1 [or Truck Loadout Air Slide		
52.088	608-4 to Truck Loadout Spout 610 is 100% Fully Enclosed]		
S2.089	Air Slides 609-4 and 701-1 transfer to Loading Spout 627		
S2.090	Silo transfers to North Rail Storage Bin 624		
S2.091	North Rail Storage Bin 624 transfer to Loading Spout 627	4 288 022	
S2.092	#1 Finish Mill Pump 512 transfer into Silos	4,388,022	
	#2 and #3 Finish Mill Pump 2212 and #1 and #2 Raw Mill Pump 213-10 transfer		
S2.093	into Silos [Silo #10 transfer to Air Slide 606-3 to Air Slide 606-2 is 100% Fully		
	Enclosed]		
S2.093A	Railcar Unloading System A transfer into Silos	1	
S2 002D	Railcar Unloading System B transfer into Silos [Cyclonaire Tank Loading and		
S2.093B	Unloading is 100% Fully Enclosed]		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from S2.086 through S2.093, S2.093A, and S2.093B shall be controlled by Baghouse (DC-618).
- <u>Descriptive Stack Parameters</u> Stack Height: 114.9 feet Stack Diameter: 1.78 feet Stack Temperature: 125 °F Exhaust Flow: 10,236.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. The maximum allowable throughput rate for S2.086 through S2.093, each, shall not exceed 187.9 tons of cement, fly ash per hour, averaged over a calendar day.
- b. The maximum allowable throughput rate for S2.093A and S2.093B, each, shall not exceed 387.9 tons of cement, fly ash per hour, averaged over a calendar day.
 - Hours

c.

- (1) **S2.086 through S2.093, S2.093A, and S2.093B, each,** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-618)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **2.12** pounds per hour, nor more than **9.28** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 2.12 pounds per hour, nor more than 9.28 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.85** pounds per hour, nor more than **3.71** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-618**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.086 through S2.093, each**, shall not exceed **57.8** pounds per hour.
- f. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.093A and S2.093B, each**, shall not exceed **66.0** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

AM. Emission Units S2.086 through S2.093, S2.093A, and S2.093B (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for S2.086 through S2.093, S2.093A, and S2.093B, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.086 through S2.093**, **S2.093A**, and **S2.093B**, each, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.086 through S2.093, S2.093A, and S2.093B** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the monthly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.086 through S2.093, S2.093A, and S2.093B** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AN. Emission Units S2.094 and S2.095

52.094 52.095 1. <u>A</u> a. b	Silo #12 Fill Silo #13 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	m North - 4,387,997	m East 305,619
52.095 1. <u>A</u> a.	Silo #13 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	4,387,997	305,619
a.			
		-1).	
2. <u>C</u> a. b	per hour, averaged over a calendar day.	ot exceed 387.9 tons o	of cement, fly as
Т	 tons per 12-month rolling period. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns ir exceed 0.52 pounds per hour, nor more than 2.28 tons per 12-month rolling per The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in exceed 0.21 pounds per hour, nor more than 0.91 tons per 12-month rolling per NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-646- 	wing specified limits 52 pounds per hour, r n diameter) to the atr riod. n diameter) to the atr riod. -1) shall not equal or o	nor more than 2. 2 nosphere shall n nosphere shall n exceed 20 percer
T re sj	 <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contecordkeeping specified in this section. All records in the log must be identified with pecified records shall be entered into the log at the end of the shift, end of the day of peration for the month, as appropriate. Monitor and record the throughput for S2.094 and S2.095, each, for each caler. Monitor and record the hours of operation for S2.094 and S2.095, each, for each caler. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation. 	ith the calendar date operation, or the end ndar day. ch calendar day. average hourly throu on. , for each 12-month r ng S2.094 and S2.095 a certified visible en n a contemporaneous	of the record. A of the final day ghput rate shall olling period. on a weekly ba missions reader log the followi



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

AN. Emission Units S2.094 and S2.095 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- f. Inspect the baghouse installed on **S2.094 and S2.095** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

- a. <u>Standards</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-646-1**) which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c))
- b. <u>Test Methods and Procedures</u>
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Ope3rating Conditions (continued)

AO. Emission Unit S2.096

System 22B – Cement Bulk Loading 42.096Silos #12 and #13 to Loading Spouts 672-3 and 672-4 via Air Slides 654 - 661[Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	m North	m East	
		í l	
	4,387,994	305,615	
 Air Pollution Control Equipment (NAC 445B.3405) a. Emissions from S2.096 shall be controlled by Baghouse (DC-652) with HEI b. Descriptive Stack Parameters Stack Height: 111.0 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient Exhaust Flow: 1,514.0 dry standard cubic feet per minute (dscfm) 	PA Filter.		
 Operating Parameters (NAC 445B.3405) The maximum allowable throughput rate for S2.096 shall not exceed 187.9 to over a calendar day. <u>Hours</u>	 a. The maximum allowable throughput rate for S2.096 shall not exceed 187.9 tons of cement, fly ash per hour, averaged over a calendar day. b. <u>Hours</u> 		
 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause th exhaust stack of Baghouse (DC-652) the following pollutants in excess of the follow a. The discharge of PM (particulate matter) to the atmosphere shall not exceet 0.092 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns exceed 0.0058 pounds per hour, nor more than 0.026 tons per 12-month rollin c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns exceed 0.00088 pounds per hour, nor more than 0.0039 tons per 12-month rollin d. NAC 445B.22017 – The opacity from the Baghouse (DC-652) shall not equal e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmost pounds per hour. 	wing specified limits: ed 0.021 pounds per he in diameter) to the att ng period. s in diameter) to the at olling period. al or exceed 20 percent	our, nor more tha mosphere shall no mosphere shall no t.	
 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a correcordkeeping specified in this section. All records in the log must be identified a specified records shall be entered into the log at the end of the shift, end of the day of operation for the month, as appropriate. a. Monitor and record the hours of operation for S2.096 for each calendar day. b. Monitor and record the throughput for S2.096 for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly base. e. Conduct and record a Method 9 visible emission test on the baghouse con operating. Each Method 9 visible emission test must be conducted by a certific with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contempor the calendar date of any required monitoring, results of the weekly visible emission test for the baghouse installed on S2.096 in accordance with the Dust Comparison. 	with the calendar date of operation, or the end the average hourly throu- tion. sis, for each 12-month in throlling S2.096 on a v ied visible emissions re- praneous log the follow nissions, and any correct	e of the record. Al d of the final day o ughput rate shall b rolling period. weekly basis whil eader in accordanc ving recordkeeping ctive actions taker	
January 5, 2009 and record the results and any corrective actions taken.			



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AP. Emission Unit S2.097

ystem 23A – Cement Bulk Loading 2		nt Bulk Loading 2 Location UTM (Zone 11, NAD 8	
-		m North	m East
2.097	Silo #14 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	4,387,993	305,607
1. <u>Ai</u> a. b.	<u>ir Pollution Control Equipment</u> (NAC 445B.3405) Emissions from S2.097 shall be controlled by Baghouse (DC-646-2) . <u>Descriptive Stack Parameters</u> Stack Height: 122.0 feet Stack Diameter: 1.00 feet Stack Temperature: 180 °F Exhaust Flow: 2,515 dry standard cubic feet per minute (dscfm)		
a.	over a calendar day.	ns of cement, fly ash	per hour, averag
b.	Hours (1) S2.097 may operate a total of 24 hours per day.		
Tł	tons per 12-month rolling period. The discharge of PM ₁₀ (particulate matter less than or equal to 10 microns in exceed 0.52 pounds per hour, nor more than 2.28 tons per 12-month rolling per The discharge of PM _{2.5} (particulate matter less than or equal to 2.5 microns in exceed 0.21 pounds per hour, nor more than 0.91 tons per 12-month rolling per NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-646 -	wing specified limits .52 pounds per hour, i n diameter) to the atr riod. in diameter) to the atr riod. (-2) shall not equal or	: nor more than 2. nosphere shall r nosphere shall r exceed 20 perce
Tł ree sp	Monitor and record the hours of operation for S2.097 for each calendar day. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operatio Record the throughput rate of material (in tons) on a cumulative monthly basis.	th the calendar date coperation, or the end e average hourly through on. s, for each 12-month r colling S2.097 on a w d visible emissions re- raneous log the follow ssions, and any correct	of the record. A of the final day aghput rate shall olling period. veekly basis wh ader in accordar ing recordkeepin ctive actions take
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Section IV. Specific Operating Conditions (continued)

AP. Emission Unit S2.097 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. Federal Requirements

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

- a. <u>Standards</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-646-2**) which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c))
- b. <u>Test Methods and Procedures</u>
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



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Section IV. Specific Operating Conditions (continued)

AQ. Emission Unit S2.098

ystem 2.	3B – Cement Bulk Loading 3	m North	m East		
2.098	Silo #15 Fill [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	4,387,984	3055,611		
1.	Air Pollution Control Equipment (NAC 445B.3405)				
	a. Emissions from S2.098 shall be controlled by Baghouse (DC-646-3).				
	b. <u>Descriptive Stack Parameters</u>				
	Stack Height: 122.0 feet				
	Stack Diameter: 1.00 feet				
	Stack Temperature: 180 °F Exhaust Flow: 2 515.0 dry standard cubic fact per minute (deefm)				
	Exhaust Flow: 2,515.0 dry standard cubic feet per minute (dscfm)				
2.	Operating Parameters (NAC 445B.3405)				
	a. The maximum allowable throughput rate for S2.098 shall not exceed 387.9 tor	is of cement, fly ash	per hour, average		
	over a calendar day.				
	b. <u>Hours</u>				
	(1) S2.098 may operate a total of 24 hours per day.				
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)				
	The Permittee, upon issuance of this operating permit, shall not discharge or cause the				
	exhaust stack of Baghouse (DC-646-3) the following pollutants in excess of the following pollutants in exces				
	a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0 .	.52 pounds per hour,	nor more than 2		
	tons per 12-month rolling period.				
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in		mosphere shall		
	exceed 0.52 pounds per hour, nor more than 2.28 tons per 12-month rolling per		1 1 11		
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall n				
	 exceed 0.21 pounds per hour, nor more than 0.91 tons per 12-month rolling per MAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-646) 		awaaad 20 para		
	 e. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-040) e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosp 				
	pounds per hour.	nere nom 52.070 sn			
4.	Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)				
	The Permittee, upon the issuance of this operating permit, shall maintain, in a cor	itemporaneous log. t	he monitoring		
	recordkeeping specified in this section. All records in the log must be identified w				
	specified records shall be entered into the log at the end of the shift, end of the day of				
	operation for the month, as appropriate.	F , ,	· · · · · · · · · · · · ·		
	a. Monitor and record the throughput for S2.098 for each calendar day.				
	b. Monitor and record the hours of operation for S2.098 for each calendar day.				
	c. Record the corresponding average hourly throughput rate in tons per hour. The	average hourly throu	ughput rate shall		
	determined from the total daily throughput and the total daily hours of operation				
	d. Record the throughput rate of material (in tons) on a cumulative monthly basis				
	e. Conduct and record a Method 9 visible emission test on the baghouse contr				
	operating. Each Method 9 visible emission test must be conducted by a certified				
	with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contempor				
	the calendar date of any required monitoring, results of the weekly visible emis				
	f. Inspect the baghouse installed on S2.098 in accordance with the Dust Coll	ector Routine Maint	enance Plan da		
	January 5, 2009 and record the results and any corrective actions taken.				
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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AQ. Emission Unit S2.098 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. Federal Requirements

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

- a. <u>Standards</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-646-3**) which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c))
- b. <u>Test Methods and Procedures</u>
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AR. Emission Unit S2.099

System 2	3C – Cement Bulk Loading 5	Location UTM (Z	
2 000	Silos #14 and #15 to Loading Spouts 672-1 and 672-2 via Air Slides 663 - 670	m North	m East
52.099	[Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	4,387,990	305,603
1.	Air Pollution Control Equipment (NAC 445B.3405)		
	a. Emissions from S2.099 shall be controlled by a Baghouse (DC-653) with HI	EPA Filter.	
	b. Descriptive Stack Parameters		
	Stack Height: 111.0 feet		
	Stack Diameter: 1.00 feet		
	Stack Temperature: Ambient		
	Exhaust Flow: 1,514.0 dry standard cubic feet per minute (dscfm)		
2.	Operating Parameters (NAC 445B.3405)		
	a. The maximum allowable throughput rate for S2.099 shall not exceed 187.9 to	ons of cement, fly ash	per hour, averag
	over a calendar day.		
	b. <u>Hours</u>		
	(1) S2.099 may operate a total of 24 hours per day.		
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)		
	The Permittee, upon issuance of this operating permit, shall not discharge or cause the		mosphere from
	exhaust stack of Baghouse (DC-653) the following pollutants in excess of the follow		
	a. The discharge of PM (particulate matter) to the atmosphere shall not excee	d 0.021 pounds per ho	our, nor more th
	0.092 tons per 12-month rolling period.		
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns	in diameter) to the atr	nosphere shall
	exceed 0.0058 pounds per hour, nor more than 0.026 tons per 12-month rolling		
	c. The discharge of PM _{2.5} (particulate matter less than or equal to 2.5 microns	in diameter) to the att	nosphere shall
	exceed 0.00088 pounds per hour, nor more than 0.0039 tons per 12-month rol	lling period.	
	d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-65	3) shall not equal or e	xceed 20 percer
	e. NAC 445B.22033 – The maximum allowable discharge of PM ₁₀ to the atmos	sphere from S2.099 sha	all not exceed 5
	pounds per hour.		
4.	Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)		
	The Permittee, upon the issuance of this operating permit, shall maintain, in a co		
	recordkeeping specified in this section. All records in the log must be identified w		
	specified records shall be entered into the log at the end of the shift, end of the day of	of operation, or the end	of the final day
	operation for the month, as appropriate.		
	a. Monitor and record the throughput for S2.099 for each calendar day.		
	b. Monitor and record the hours of operation for S2.099 for each calendar day.		
	c. Record the corresponding average hourly throughput rate in tons per hour. Th		ghput rate shall
	determined from the total daily throughput and the total daily hours of operati		
	d. Record the throughput rate of material (in tons) on a cumulative monthly basi		01
	e. Conduct and record a Method 9 visible emission test on the baghouse competing. Each Method 9 visible emission test must be conducted by a certific		
	with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contempo		
	the calendar date of any required monitoring, results of the weekly visible em		



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AR. Emission Unit S2.099 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- f. Inspect the baghouse installed on **S2.099** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

a. <u>Standards</u>

b.

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-646-3**) which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c))

- Test Methods and Procedures
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AS. Emission Unit S2.100 through S2.102

System 24	System 24 – Packhouse		Location UTM (Zone 11, NAD 83)	
System 24	- racknouse	m North	m East	
	Pack Storage Bin transfer to Bucket Elevator 704 [Air Slide 701 transfer to Pack			
S2.100	Storage Bin to Rotary Feeder 702 to Air Slides 703-3, 703-4, and 703-2 to Air			
	Slide 703-1 to Bucket Elevator 704 is 100% Fully Enclosed]			
S2.101	Bucket Elevator 704 to Air Slide 705-1 and 706-1	4,388,010	305,660	
	Air Slide 705-1 transfer to Packer 707 and Air Slides 706-1 and 706-2 [Baghouse			
S2.102	(DC-710) transfer to Rotary Feeder 710-1 to Air Slide Conveyor 711-2 to Bucket			
	Elevator 704 is 100% Fully Enclosed]			

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. Emissions from **S2.100 through S2.102** shall be controlled by a **Baghouse (DC-710)**.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 51.9 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient Exhaust Flow: 3,527.0 dry standard cubic feet per minute (dscfm)
- 2. <u>Operating Parameters</u> (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **S2.100 through S2.102, each**, shall not exceed **60.0** tons of **cement**, **fly ash** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) S2.100 through S2.102, each, may operate a total of 24 hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-710)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.69** pounds per hour, nor more than **3.00** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed **0.69** pounds per hour, nor more than **3.00** tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.17** pounds per hour, nor more than **0.75** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse** (**DC-710**) shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.100 through S2.102, each**, shall not exceed **46.3** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AS. Emission Unit S2.100 through S2.102 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.100 through S2.102**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.100 through S2.102**, each, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.100 through S2.102** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.100 through S2.102** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1)) The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AT. Emission Units S2.104 and S2.105

System 25B – Rail Unloading/Transfer		Location UTM (Zone 11, NAI	
<u>S2.104</u>		m North	m East
	Rail Transfer 634-8 to South Storage Bin 625Silo #8 transfer to South Storage Bin 625 [Cyclonaire Tank Loading and	4,388,004	305,675
S2.105	Unloading is 100% Fully Enclosed]	+,300,004	505,075
1.	Air Pollution Control Equipment (NAC 445B.3405)a.Emissions from S2.104 and S2.105 shall be controlled by Baghouse (DC-61b.Descriptive Stack Parameters Stack Height: 60.0 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient Exhaust Flow: 1,764.0 dry standard cubic feet per minute (dscfm)	1).	
2.	Operating Parameters (NAC 445B.3405)a.The maximum allowable throughput rate for S2.104 and S2.105, each, shall per hour, averaged over a calendar day.b.Hours (1) S2.104 and S2.105, each, may operate a total of 24 hours per day.	not exceed 100.0 tons	of cement, fly a
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the exhaust stack of Baghouse (DC-611) the following pollutants in excess of the follor a. The discharge of PM (particulate matter) to the atmosphere shall not exceed tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns exceed 0.41 pounds per hour, nor more than 1.80 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns exceed 0.14 pounds per hour, nor more than 0.60 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-6). e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atm shall not exceed 51.3 pounds per hour. 	wing specified limits: 0.41 pounds per hour, in diameter) to the at period. in diameter) to the at period. 11) shall not equal or e	nor more than 1. mosphere shall mosphere shall mosp
4.	 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a correcordkeeping specified in this section. All records in the log must be identified specified records shall be entered into the log at the end of the shift, end of the day of operation for the month, as appropriate. a. Monitor and record the throughput for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record the hours of operation for S2.104 and S2.105, each, for each call b. Monitor and record a Method 9 visible emission test on the baghouse controll while operating. Each Method 9 visible emission test must be conducted the accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain recordkeeping: the calendar date of any required monitoring, results of the we actions taken. 	with the calendar date of operation, or the end lendar day. each calendar day. he average hourly throu- tion. is, for each 12-month the ling S2.104 and S2.109 by a certified visible end in a contemporaneou	of the record. A l of the final day aghput rate shall colling period. 5 on a weekly ba missions reader s log the followi



Facility ID No. A0030Permit No. AP3241-0387.05CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AT. Emission Units S2.104 and S2.105 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

f. Inspect the baghouse installed on **S2.104 and S2.105** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AU. Emission Unit S2.106

stem 2	6 – Fly Ash Bulk Loading		one 11, NAD 8
	in Nor		m East
106	South Storage Bin 625 transfer to Air Slide 609-4 and to Loading Spout 610 [Cyclonaire Tank Loading and Unloading is 100% Fully Enclosed]	4,388,008	305,666
1.	Air Pollution Control Equipment (NAC 445B.3405)		
	 a. Emissions from S2.106 shall be controlled by a Baghouse (DC-612) with HI b. Descriptive Stack Parameters Stack Unichty 50 foot 	EPA Filter.	
	Stack Height: 50 feet Stack Diameter: 0.94 feet		
	Stack Temperature: Ambient Exhaust Flow: 2,645.0 dry standard cubic feet per minute (dscfm)		
2.	Operating Parameters (NAC 445B.3405) a. The maximum allowable throughput rate for S2.106 shall not exceed 100.0 to	one of comont fly ash	por hour over
	over a calendar day.	ons of cement, ny asi	per nour, avera
	b. <u>Hours</u> (1) S2.106 may operate a total of 24 hours per day.		
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)		1 6
	The Permittee, upon issuance of this operating permit, shall not discharge or cause the exhaust stack of Baghouse (DC-612) the following pollutants in excess of the following pollutants in excess of the following pollutants in excession of	wing specified limits:	
	a. The discharge of PM (particulate matter) to the atmosphere shall not excee 0.049 tons per 12-month rolling period.	ed 0.011 pounds per ho	our, nor more
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns exceed 0.0031 pounds per hour, nor more than 0.014 tons per 12-month rolling		mosphere shall
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns exceed 0.00047 pounds per hour, nor more than 0.0021 tons per 12-month ro	in diameter) to the at	mosphere shall
	d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-6)	12) shall not equal or e	
	e. NAC 445B.22033 – The maximum allowable discharge of PM_{10} to the atmo- pounds per hour.	sphere from 52.100 sh	an not exceed .
4.	Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a co	ontomnonono log t	ha manitaring
	recordkeeping specified in this section. All records in the log must be identified specified records shall be entered into the log at the end of the shift, end of the day of	with the calendar date	of the record.
	operation for the month, as appropriate.	T, t	
	a. Monitor and record the throughput for S2.106 for each calendar day.b. Monitor and record the hours of operation for S2.106 for each calendar day.		
	c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operated and the total daily ho		ighput rate shal
	d. Record the throughput rate of material (in tons) on a cumulative monthly base. Conduct and record a Method 9 visible emission test on the baghouse con		
	operating. Each Method 9 visible emission test on the baghouse con with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contempo	ied visible emissions re	ader in accorda



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AU. Emission Unit S2.106 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

f. Inspect the baghouse installed on **S2.106** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AV. Emission Unit PF1.007

System 27	A – Coal/Coke Handling (Rail Unloading)		Lone 11, NAD 83)
•		m North m East	
PF1.007	Railcar Unloading to Conveyor 111	4,388,080	305,641
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) PF1.007 has no add-on controls.		
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.007 shall not exceed 200.0 to over a calendar day. <u>Hours</u> (1) PF1.007 may operate a total of 24 hours per day. 	ns of coal and coke	per hour, average
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.007 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 1.38 pounds per hour, nor more than 6.0 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.48 pounds per hour, nor more than 2.10 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.074 pounds per hour, nor more than 0.32 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from the PF1.007 shall not equal or exceed 20 percent. e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere from PF1.007 shall not exceed 58. pounds per hour. 		
4.			of the record. A l of the final day nghput rate shall l rolling period. ation of an affected



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AV. Emission Unit PF1.007 (continued)

5. <u>Federal Requirements</u>

<u>Standards of Performance for New Stationary Sources – 40 CFR Part 60 Subpart Y – Coal Preparation and Processing Plants</u> a. Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems

- Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-612)** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))
 - (2) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))
- d. <u>Reporting and Recordkeeping</u>
 - (1) The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)):
 - (a) The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - (b) All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3))
 - (2) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

AW. Emission Units PF1.008 through PF1.010, PF1.032 and PF1.033

System 27B – Coal/Coke Handling (Covered Conveyors)		Location UTM (Zone 11, NAD 83)	
		m North	m East
PF1.008	Conveyor 111 transfer to Conveyor 111-1 or Conveyor 2302	4,388,088	305,660
PF1.009	Conveyor 2302 transfer to Conveyor 2302-1	4,388,064	305,669
PF1.010	Conveyor 2302-1 transfer to Conveyor 2302-2	4,388,018	305,729
PF1.032	Conveyor 111 transfer to Conveyor 111-2	4,388,088	305,660
PF1.033	Belt Conveyor 2103 transfer to Belt Conveyor 2106	4,388,081	305,698

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from **PF1.008 through PF1.010, PF1.032 and PF1.033** shall be controlled by a **Building Enclosure**.
- 2. Operating Parameters (NAC 445B.3405)
 - a. The maximum allowable throughput rate for **PF1.008 through PF1.010, PF1.032 and PF1.033, each,** shall not exceed **200.0** tons of **coal and coke** per hour, averaged over a calendar day.
 - b. <u>Hours</u>
 - (1) **PF1.008 through PF1.010, PF1.032 and PF1.033, each**, may operate a total of **24** hours per day.
- Emission Limits (NAC 445B.305, NAC 445B.3405)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.008 through PF1.010, PF1.032 and PF1.033, each, the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.69** pounds per hour, nor more than **3.02** tons per 12-month rolling period.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.24 pounds per hour, nor more than 1.05 tons per 12-month rolling period.
 - c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.037** pounds per hour, nor more than **0.16** tons per 12-month rolling period.
 - d. NAC 445B.22017 The opacity from **PF1.008 through PF1.010, PF1.032 and PF1.033, each,** shall not equal or exceed **20** percent.
 - e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **PF1.008 through PF1.010**, **PF1.032 and PF1.033, each**, shall not exceed **58.5** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **PF1.008 through PF1.010, PF1.032 and PF1.033, each**, for each calendar day.
- b. Monitor and record the hours of operation for **PF1.008 through PF1.010, PF1.032 and PF1.033, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.



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Section IV. <u>Specific Operating Conditions</u> (continued)

AW. Emission Units PF1.008 through PF1.010, PF1.032 and PF1.033 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the enclosure installed on **PF1.008 through PF1.010, PF1.032 and PF1.033, each,** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.
- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants

- a. <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.008 through PF1.010, PF1.032 and PF1.033, each,** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u>

The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))

- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))



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Section IV. <u>Specific Operating Conditions</u> (continued)

AW. Emission Units PF1.008 – PF1.010, PF1.032 and PF1.033 (continued)

5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources – 40 CFR Part 60 Subpart Y – Coal Preparation and Processing Plants (continued)

- c. <u>Test Methods and Procedures</u> (continued)
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)): (continued)
 - (2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))
 - (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
 - (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
 - (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
 - (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))
- d. <u>Reporting and Recordkeeping</u>
 - (1) The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)):
 - (a) The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - (b) All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3))
 - (2) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Section IV. Specific Operating Conditions (continued)

AX. Emission Units PF1.011 and PF1.012

System 27C – Coal/Coke Handling (Coal/Coke Storage Building)		Location UTM (Zone 11, NAD 83					
			m North	m East			
PF1.011		or 2302-2 transfer to Belt Tripper 2303	4,388,018	305,729			
PF1.012	Belt Tri	pper 2303 transfer to Coal Storage	4,388,018	305,729			
1.	Air Pollut	ion Control Equipment (NAC 445B.3405)					
	Emissions from PF1.011 and PF1.012 shall be controlled by a Building Enclosure .						
2.		<u>Parameters</u> (NAC 445B.3405)					
	a. Th	e maximum allowable throughput rate for PF1.011 and PF1.012, each, shal	ll not exceed 200.0 tor	ns of coal and co l			
	per	hour, averaged over a calendar day.					
	b. <u>Ho</u>						
	(1)	PF1.011 and PF1.012, each, may operate a total of 24 hours per day.					
3.		Limits (NAC 445B.305, NAC 445B.3405)					
		e Permittee, upon issuance of this operating permit, shall not discharge or		nto the atmosphe			
	from PF1.011 the following pollutants in excess of the following specified limits:						
	(1)		exceed 0.69 pounds]	per hour, nor mo			
		than 3.02 tons per 12-month rolling period.					
	(2) The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere						
	(2)	not exceed 0.24 pounds per hour, nor more than 1.05 tons per 12-month					
	(3)			e atmosphere sh			
		not exceed 0.037 pounds per hour, nor more than 0.16 tons per 12-month rolling period.					
		(4) NAC 445B.22017 – The opacity from PF1.011 shall not equal or exceed 20 percent.					
	(5)	NAC 445B.22033 – The maximum allowable discharge of PM_{10} to the exceed 58.5 pounds per hour.	the atmosphere from	PF1.011 shall n			
	b. The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into t						
	from PF1.012 the following pollutants in excess of the following specified limits:						
	(1)			per hour, nor mo			
	. /	than 0.78 tons per 12-month rolling period.					
	(2)	1 01	ons in diameter) to th	e atmosphere sh			
		not exceed 0.085 pounds per hour, nor more than 0.37 tons per 12-mon	th rolling period.	-			
	(3)	The discharge of PM2.5 (particulate matter less than or equal to 2.5 mice	rons in diameter) to th	e atmosphere sh			
		not exceed 0.013 pounds per hour, nor more than 0.056 tons per 12-mo					
	(4)						
	(5) NAC 445B.22033 – The maximum allowable discharge of PM ₁₀ to the atmosphere from PF1.012 shall no exceed 58.5 pounds per hour.						
		exceed core pounds per nour.					



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Section IV. Specific Operating Conditions (continued)

AX. Emission Units PF1.011 and PF1.012 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **PF1.011 and PF1.012**, each, for each calendar day.
- b. Monitor and record the hours of operation for **PF1.011 and PF1.012, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the **building enclosure** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the enclosure installed on **PF1.011 and PF1.012** on a **weekly** basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly.
- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Federal Requirements</u>

<u>Standards of Performance for New Stationary Sources – 40 CFR Part 60 Subpart Y – Coal Preparation and Processing Plants</u> a. Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems

- The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.011 and PF1.012, each**, which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))



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Section IV. Specific Operating Conditions (continued)

AX. Emission Units PF1.011 and PF1.012 (continued)

- 5. <u>Federal Requirements</u> (continued) <u>Standards of Performance for New Stationary Sources – 40 CFR Part 60 Subpart Y – Coal Preparation and Processing Plants</u> (continued)
 - c. <u>Test Methods and Procedures</u> (continued)
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)): (continued)
 - (2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))
 - (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
 - (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
 - (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
 - (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))
 - d. <u>Reporting and Recordkeeping</u>
 - (1) The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)):
 - (a) The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - (b) All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3))
 - (2) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Section IV. Specific Operating Conditions (continued)

AY. Emission Units PF1.013 and PF1.014

System 27	/D – Coal/Coke Handling (Coal/Coke Storage Building)		Location UTM (Zone 11, NAD 83)		
-		m North	m East		
PF1.013	Inside Storage 2300-23A transfer to Weigh Feeders 2305-1, 2, 3, 4, 5	4,388,018	305,729		
PF1.014	Weigh Feeders 2305-1, 2, 3, 4, 5 transfer to Conveyor 2306	4,388,018	305,729		
1.	Air Pollution Control Equipment (NAC 445B.3405) Emissions from PF1.013 and PF1.014 shall be controlled by a Building En	closure.			
2.	Operating Parameters (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.013 and PF1.014, each, shall not exceed 20.0 tons of coal and coke per hour, averaged over a calendar day. b. Hours (1) PF1.013 and PF1.014, each, may operate a total of 24 hours per day.				
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.013 and PF1.014, each, the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.069 pounds per hour, nor more than 0.3 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.024 pounds per hour, nor more than 0.11 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.0037 pounds per hour, nor more than 0.016 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from PF1.013 and PF1.014, each, shall not equal or exceed 20 percent. e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere from PF1.013 and PF1.014, each shall not exceed 30.5 pounds per hour. 				
4.	 <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring an recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. A specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day operation for the month, as appropriate. a. Monitor and record the throughput for PF1.013 and PF1.014, each, for each calendar day. b. Monitor and record the throughput for PF1.013 and PF1.014, each, for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall i determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period. e. Conduct and record an observation of visible emissions (excluding water vapor) on the building enclosure on a week basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with t sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the followin recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any correcti actions taken. f. Inspect the enclosure installed on PF1.013 and PF1.014 on a weekly basis to confirm that the enclosure is in place an functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours ensure that the enclosure is functioning prope				



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Section IV. Specific Operating Conditions (continued)

AY. Emission Units PF1.013 and PF1.014 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants

- a. <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.013 and PF1.014, each,** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))

- (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
- (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
- (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AY. Emission Units PF1.013 and PF1.014 (continued)

5. Federal Requirements (continued) Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants (continued) d.

Reporting and Recordkeeping

- The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)): (1)
 - The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences (a) when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3)) (b)
- After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to (2)demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AZ. Emission Unit PF1.015

		Location UTM (Zone 11, NAD 83)		
÷	E – Coal/Coke Handling (Coal/Coke Storage Building)	m North m East		
PF1.015	Conveyor 2306 transfer to Conveyor 2316	4,388,060	305,711	
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) PF1.015 has no add-on controls.			
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.015 shall not exceed 20.0 to over a calendar day. b. <u>Hours</u> (1) PF1.015 may operate a total of 24 hours per day. 	ons of coal and coke p	per hour, averaged	
3.	 Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.015 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.14 pounds per hour, nor more than 0.60 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.048 pounds per hour, nor more than 0.21 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.0074 pounds per hour, nor more than 0.032 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from PF1.015 shall not equal or exceed 20 percent. e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere from PF1.015 shall not exceed 30.5 pounds per hour. 			
4.	 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneou recordkeeping specified in this section. All records in the log must be identified with the calend specified records shall be entered into the log at the end of the shift, end of the day of operation, or operation for the month, as appropriate. a. Monitor and record the throughput for PF1.015 for each calendar day. b. Monitor and record the hours of operation for PF1.015 for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The average hour determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-e. Conduct and record an observation of visible emissions (excluding water vapor) on PF1.01 operating. The observer shall stand at a distance sufficient to provide a clear view of the emiss to their back. If visible emissions are observed, the Permittee shall conduct and record a Mett Each Method 9 visible emission test shall be conducted by a certified visible emissions rea CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the followed and the			
	 calendar date of any required monitoring, results of the weekly visible emissio f. Inspect the enclosure installed on PF1.015 on a weekly basis to confirm that t properly. If the enclosure is in disrepair, the Permittee shall perform corrective enclosure is functioning properly. g. Maintain records of the occurrence and duration of any startup, shutdown, or ma facility; any malfunction of the air pollution control equipment; or any periods system or monitoring device is inoperative. (40 CFR 60.7(b)) 	he enclosure is in pla- action within 24 hour alfunction in the opera	ce and functioning s to ensure that the ation of an affected	



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AZ. Emission Unit PF1.015 (continued)

5. Federal Requirements

<u>Standards of Performance for New Stationary Sources – 40 CFR Part 60 Subpart Y – Coal Preparation and Processing Plants</u> a. Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems

- <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u>
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.015** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. Test Methods and Procedures
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))
 - (2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))
 - (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
 - (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
 - (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
 - (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

AZ. Emission Unit PF1.015 (continued)

5. Federal Requirements (continued) Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants (continued) d.

Reporting and Recordkeeping

- The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)): (1)
 - The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences (a) when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3)) (b)
- After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to (2)demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Section IV. Specific Operating Conditions (continued)

BA. Emission Unit PF1.016

System 27F – Coal/Coke Handling (Mill Building Enclosure)		Location UTM (Zone 11, NAD 83			
		m North	m East		
PF1.016	Conveyor 2307 transfer to Coal Mill #1 Storage Bin 803	4,388,068	305,736		
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.016 shall be controlled by a Building Enclosure .				
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.016 shall not exceed 20.0 to over a calendar day. <u>Hours</u> (1) PF1.016 may operate a total of 24 hours per day. 	ns of coal and coke j	per hour, averaged		
3.	 PF1.016 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.0 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in exceed 0.024 pounds per hour, nor more than 0.11 tons per 12-month rolling p c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns i exceed 0.0037 pounds per hour, nor more than 0.016 tons per 12-month rolling d. NAC 445B.22017 – The opacity from PF1.016 shall not equal or exceed 20 per pounds 	 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.016 the following pollutants in excess of the following specified limits: The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.069 pounds per hour, nor more than 0.30 tons per 12-month rolling period. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.024 pounds per hour, nor more than 0.11 tons per 12-month rolling period. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.0037 pounds per hour, nor more than 0.016 tons per 12-month rolling period. NAC 445B.22017 – The opacity from PF1.016 shall not equal or exceed 20 percent. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere from PF1.016 shall not exceed 30.5 			
4.	 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. a. Monitor and record the throughput for PF1.016 for each calendar day. b. Monitor and record the hours of operation for PF1.016 for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period. e. Conduct and record an observation of visible emissions (excluding water vapor) on the building enclosure on a weekly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed, the Permittee shall conduct and record a Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken. f. Inspect the enclosure installed on PF1.016 on a weekly basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the enclosure is functioning properly. 				



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BA. Emission Unit PF1.016 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.(continued)

- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants

- a. <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.016** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))

- (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
- (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
- (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))



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Section IV. Specific Operating Conditions (continued)

BA. Emission Unit PF1.016 (continued)

5. Federal Requirements (continued) Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants (continued) d.

Reporting and Recordkeeping

- The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)): (1)
 - The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences (a) when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3)) (b)
- After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to (2)demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Section IV. Specific Operating Conditions (continued)

BB. Emission Units PF1.017 and PF1.018

System 27	7G – Coal/Coke Handling (Mill Building Enclosure)	Location UTM (Z	Location UTM (Zone 11, NAD 83)		
·		m North	m East		
PF1.017	Storage Bin 803 transfer to Feeder Belt 804	4,388,081	305,757		
PF1.018	Feeder Belt 804 transfer to Coal Mill #1 805	4,388,081	305,757		
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.017 and PF1.018 shall be controlled by a Building Enc	closure.			
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.017 and PF1.018, e per hour, averaged over a calendar day. <u>Hours</u> (1) PF1.017 and PF1.018, each, may operate a total of 24 hours per hours 		s of coal and cok		
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.017 and PF1.018, each, the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.026 pounds per hour, nor more than 0.11 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.0090 pounds per hour, nor more than 0.039 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.0014 pounds per hour, nor more than 0.0061 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from PF1.017 and PF1.018, each, shall not equal or exceed 20 percent. e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere from PF1.017 and PF1.018, each, 				
4.	 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, recordkeeping specified in this section. All records in the log must be iden specified records shall be entered into the log at the end of the shift, end of th operation for the month, as appropriate. a. Monitor and record the throughput for PF1.017 and PF1.018, each, for b. Monitor and record the hours of operation for PF1.017 and PF1.018, each, for determined from the total daily throughput rate in tons per hed determined from the total daily throughput and the total daily hours of d. Record the throughput rate of material (in tons) on a cumulative month? e. Conduct and record an observation of visible emissions (excluding water basis while operating. The observer shall stand at a distance sufficient the sun oriented to their back. If visible emission test shall be conduct accordance with 40 CFR Part 60, Appendix A. The Permittee shall mar recordkeeping: the calendar date of any required monitoring, results of actions taken. f. Inspect the enclosure installed on PF1.017 and PF1.018, each, on a place and functioning properly. If the enclosure is in disrepair, the Permit. 	tified with the calendar date e day of operation, or the end or each calendar day. each, for each calendar day. our. The average hourly throu operation. nly basis, for each 12-month n er vapor) on the building end to provide a clear view of the ttee shall conduct and record cted by a certified visible e aintain in a contemporaneous the weekly visible emissions, weekly basis to confirm that	of the record. A l of the final day of ughput rate shall b rolling period. Iosure on a weekl emissions with th a Method 9 visibl missions reader i s log the followin and any correctiv		



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Section IV. Specific Operating Conditions (continued)

BB. Emission Units PF1.017 and PF1.018 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants

- a. <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.017 and PF1.018, each,** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))

- (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
- (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
- (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))



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Section IV. Specific Operating Conditions (continued)

Emission Units PF1.017 and PF1.018 (continued) BB.

5. Federal Requirements (continued) Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants (continued) d.

Reporting and Recordkeeping

- The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)): (1)
 - The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences (a) when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3)) (b)
- After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to (2)demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Section IV. Specific Operating Conditions (continued)

BC. Emission Units PF1.019 and PF1.020

System 27H – Coal/Coke Handling (Mill Building Enclosure)		Location UTM (Zone 11, NAD 83)			
•		m North	m East		
PF1.019	Conveyor 2309 transfer to Conveyor 2307	4,388,068	305,736		
PF1.020	Conveyor 2316 transfer to Bin 2041, Conveyor 2309, or Screw Conveyor 2316-2	4,388,068	305,736		
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.019 and PF1.020 shall be controlled by a Building Enclosure .				
2.	Operating Parameters (NAC 445B.3405)				
2.	 a. The maximum allowable throughput rate for PF1.019 and PF1.020, each, shal per hour, averaged over a calendar day. b. <u>Hours</u> (1) PF1.019 and PF1.020, each, may operate a total of 24 hours per day. 	l not exceed 20.0 ton	s of coal and cok o		
3.	<u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause t	he discharge into the	e atmosphere fror		
	PF1.019 and PF1.020, each , the following pollutants in excess of the following speci		e utiliosphere non		
	a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.0 tons per 12-month rolling period.		nor more than 0.3		
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in exceed 0.024 pounds per hour, nor more than 0.11 tons per 12-month rolling per	·	mosphere shall no		
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.0037 pounds per hour, nor more than 0.016 tons per 12-month rolling period.				
	NAC 445B.22017 – The opacity from PF1.019 and PF1.020, each , shall not equal or exceed 20 percent.				
	e. NAC 445B.22033 – The maximum allowable discharge of PM ₁₀ to the atmosphere shall not exceed 30.5 pounds per hour.	here from PF1.019 a	nd PF1.020, each		
4.	Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a con recordkeeping specified in this section. All records in the log must be identified wi specified records shall be entered into the log at the end of the shift, end of the day of operation for the month, as appropriate.	ith the calendar date	of the record. Al		
	a. Monitor and record the throughput for PF1.019 and PF1.020, each, for each ca	alendar day.			
	 b. Monitor and record the hours of operation for PF1.019 and PF1.020, each, for c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operatio 	average hourly throu	ighput rate shall b		
	d. Record the throughput rate of material (in tons) on a cumulative monthly basis,		olling period		
	 e. Conduct and record an observation of visible emissions (excluding water vapor) basis while operating. The observer shall stand at a distance sufficient to provid sun oriented to their back. If visible emissions are observed, the Permittee shall emission test. Each Method 9 visible emission test shall be conducted by a accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in recordkeeping: the calendar date of any required monitoring, results of the week actions taken. 	on the building enc le a clear view of the l conduct and record a certified visible en n a contemporaneous	losure on a weekl emissions with th a Method 9 visibl missions reader i s log the followin		
	f. Inspect the enclosure installed on PF1.019 and PF1.020, each , on a weekly be place and functioning properly. If the enclosure is in disrepair, the Permittee sh hours to ensure that the enclosure is functioning properly.				
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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BC. Emission Units PF1.019 and PF1.020 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants

- a. <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.019 and PF1.020, each,** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. <u>Test Methods and Procedures</u>
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))

- (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
- (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
- (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BC. Emission Unit PF1.019 and PF1.020 (continued)

5. Federal Requirements (continued) Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants (continued) d.

Reporting and Recordkeeping

- The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)): (1)
 - The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences (a) when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3)) (b)
- After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to (2)demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BD. Emission Units PF1.021 and PF1.022

System 27I – Coal/Coke Handling (Mill Building Enclosure)		Location UTM (Zone 11, NAD 83)				
		m North	m East			
PF1.021	Storage Bin 2041 transfer to Feeder Belt 2042	4,388,068	305,736			
PF1.020	Feeder Belt 2042 transfer to Coal Mill #2 2043	4,388,068	305,736			
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.021 and PF1.022 shall be controlled by a Building Enclosure .					
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.021 and PF1.022, each, shall not exceed 7.5 tons of coal and coke per hour, averaged over a calendar day. <u>Hours</u> (1) PF1.021 and PF1.022, each, may operate a total of 24 hours per day. 					
3.	 Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause PF1.021 and PF1.022, each, the following pollutants in excess of the following specta. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.0 tons per 12-month rolling period. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in exceed 0.0090 pounds per hour, nor more than 0.039 tons per 12-month rolling The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns i exceed 0.0014 pounds per hour, nor more than 0.0061 tons per 12-month rolling NAC 445B.22017 – The opacity from PF1.021 and PF1.022, each, shall not exceed 15.8 pounds per hour. 	ified limits: D26 pounds per hour, in diameter) to the atri g period. in diameter) to the atri ing period. equal or exceed 20 pe	nor more than 0.11 mosphere shall not mosphere shall not rcent.			
4.	 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring an recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. A specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. a. Monitor and record the throughput for PF1.021 and PF1.022, each, for each calendar day. b. Monitor and record the hours of operation for PF1.021 and PF1.022, each, for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period. e. Conduct and record an observation of visible emissions (excluding water vapor) on the building enclosure on a weekl basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with th sun oriented to their back. If visible emission test shall be conducted by a certified visible emissions reader i accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the followin recordaceping: the calendar date of any required monitoring, results of the weekly visible emissions, and any correctiv actions taken. f. Inspect the enclosure installed on PF1.021 and PF1.022, each, on a weekly basis to confirm that the enclosure is i place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 2 hours to ensure that the enclosure is functioning properly. 		of the record. All of the final day of aghput rate shall be colling period. Iosure on a weekly emissions with the a Method 9 visible missions reader in s log the following and any corrective the enclosure is in			



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BD. Emission Units PF1.021 and PF1.022 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- g. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u>

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants

- a. <u>Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems</u> The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.021 and PF1.022, each,** which exhibit **20** percent opacity, or greater. (40 CFR 60.254(a))
- b. <u>Compliance Requirements</u> The Permittee must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257. (40 CFR 60.255(a))
- c. Test Methods and Procedures
 - The Permittee must determine compliance with the applicable opacity standards as specified below (40 CFR 60.257(a)):
 - (1) Method 9 of Appendix A-4 of Part 60 and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified below (40 CFR 60.257(a)(1)):
 - (a) The duration of the Method 9 of Appendix A-4 of Part 60 performance test shall be 1 hour (ten 6-minute averages). (40 CFR 60.257(a)(1)(i))
 - (b) If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of Part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (40 CFR 60.257(a)(1)(ii))

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used. (40 CFR 60.257(a)(2))

- (a) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back. (40 CFR 60.257(a)(2)(i))
- (b) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction. (40 CFR 60.257(a)(2)(ii))
- (c) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission. (40 CFR 60.257(a)(2)(iii))
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified below (40 CFR 60.257(a)(3)):
 - (a) No more than three emissions points may be read concurrently. (40 CFR 60.257(a)(3)(i))
 - (b) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. (40 CFR 60.257(a)(3)(ii))
 - (c) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point. (40 CFR 60.257(a)(3)(iii))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BD. Emission Units PF1.021 and PF1.022 (continued)

5. Federal Requirements (continued) Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart Y - Coal Preparation and Processing Plants (continued) d.

Reporting and Recordkeeping

- The Permittee shall report semiannually periods of excess emissions as follow (40 CFR 60.258(b)): (1)
 - The Permittee shall submit semiannual reports to the Administrator or delegated authority of occurrences (a) when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (40 CFR 60.258(b)(2))
 - All 6-minute average opacities that exceed the applicable standard. (40 CFR 60.258(b)(3)) (b)
- After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to (2)demonstrate compliance with Subpart Y, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A-4 of this part opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. (40 CFR 60.258(d))



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Section IV. Specific Operating Conditions (continued)

BE. Emission Unit S2.107

/stem 28A –	Finish Mill Feed Storage Tank and Handling	m North	Zone 11, NAD 83) m East		
F	neumatic Loading to Finish Mill Feed Storage Tank [Finish Mill Feed Storage	III Northi	III East		
107	ank transfer to Rotary Feeder 2240 to Weigh Screw Conveyor 2241 to Screw	4,388,063	305,722		
C	Conveyor 2242 to Screw Conveyor 2243 to Finish Mill #2 and #3 is 100% Fully	4,388,003	505,722		
E	Inclosed]				
1. <u>Ai</u>	Pollution Control Equipment (NAC 445B.3405)				
a.	Emissions from S2.107 shall be controlled by a Baghouse (DC-2238-3).				
b.	Descriptive Stack Parameters				
	Stack Height: 48.0 feet Stack Diameter: 1.00 feet				
	Stack Diameter: 1.00 leet Stack Temperature: Ambient				
	Exhaust Flow: 2,892.0 dry standard cubic feet per minute (dscfm)				
2. <u>Op</u>	erating Parameters (NAC 445B.3405)				
2. <u>Op</u> a.	The maximum allowable throughput rate for S2.107 shall not exceed 35.0 to	ns of gynsum. fly a	sh. slag. pozzola		
u	cement kiln dust, and limestone per hour, averaged over a calendar day, nor rolling period.				
b.	Hours				
0.	(1) S2.107 may operate a total of 24 hours per day.				
	(2) S2.107 may operate a total of 2,000 hours per 12-month rolling period.				
3. <u>En</u>	Emission Limits (NAC 445B.305, NAC 445B.3405)				
	The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the				
exl	exhaust stack of Baghouse (DC-2238-3) the following pollutants in excess of the following specified limits:				
a.					
h	tons per 12-month rolling period.	n diamatan) to the o	tmaanhana ahall i		
D.	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall no exceed 0.28 pounds per hour, nor more than 0.28 tons per 12-month rolling period.				
с.					
	exceed 0.28 pounds per hour, nor more than 0.28 tons per 12-month rolling period.				
d.	d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse (DC-2238-3) shall not equal or exceed 20 percent				
e.	NAC 445B.22033 – The maximum allowable discharge of PM_{10} to the atmosp	phere from S2.107 sh	hall not exceed 4		
	pounds per hour.				
4. <u>M</u>	nitoring, Recordkeeping, and Reporting (NAC 445B.3405)				
	The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and				
	recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All				
	specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of				
-	operation for the month, as appropriate.				
a. b.	Monitor and record the throughput for S2.107 for each calendar day. Monitor and record the hours of operation for S2.107 for each calendar day.				
0. c.	Record the corresponding average hourly throughput rate in tons per hour. The	average hourly thro	ughnut rate shall		
0.	determined from the total daily throughput and the total daily hours of operation		-onput fute shall		
d.	Record the throughput rate of material (in tons) on a cumulative monthly basis		rolling period.		



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BE. Emission Unit S2.107 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- f. Conduct and record a Method 9 visible emission test on the baghouse controlling **S2.107** on a **weekly** basis while operating. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- g. Inspect the baghouse installed on **S2.107** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.
- h. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. Federal Requirements

Standards of Performance for New Stationary Sources - 40 CFR Part 60 Subpart F - Portland Cement Plants

a. <u>Standards</u>

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-2238-3)** which exhibit **10** percent opacity, or greater. (40 CFR 60.62(c))

- b. <u>Test Methods and Procedures</u>
 - (1) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity. (40 CFR 60.64(b)(2))
 - (2) The Permittee must follow the appropriate monitoring procedures in 40 CFR 63.1350(f), (m)(1) through (4), (10) and (11), (o), and (p). (40 CFR 60.64(b)(3))
 - (3) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by Subpart F the Permittee must submit the results of the performance tests conducted to demonstrate compliance under Subpart F to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. (40 CFR 60.64(d)(1))



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Section IV. Specific Operating Conditions (continued)

BF. Emission Units PF1.034, PF1.043 and PF1.044

System 28	BC – Lime Handling (Finish Mill Feed Storage Tank)	Location UTM (Z			
•		m North	m East		
PF1.034	Loader transfer to Feed Hopper #1	4,388,081	305,698		
PF1.043 PF1.044	Feed Hopper transfer to Feed Screw ConveyorFeed Screw Conveyor transfer to Guppy	4,388,081 4,388,081	<u>305,698</u> 305,698		
F1.044	reed Screw Conveyor transfer to Suppy	4,500,001	303,098		
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.034, PF1.043 and PF1.044 shall be controlled by a Bui	lding Enclosure.			
2.	Operating Parameters (NAC 445B.3405)				
	a. The maximum allowable throughput rate for PF1.034 , PF1.043 and P .	F1.044, each, shall not excee	d 35.0 tons of li		
	per hour, averaged over a calendar day.				
	b. <u>Hours</u>				
	(1) PF1.034, PF1.043 and PF1.044, each, may operate a total of 2	4 hours per day.			
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)				
	The Permittee, upon issuance of this operating permit, shall not discharge o	r cause the discharge into the	e atmosphere fr		
	PF1.034, PF1.043 and PF1.044, each, the following pollutants in excess of t				
	a. The discharge of PM (particulate matter) to the atmosphere shall not e				
	tons per 12-month rolling period.				
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 m	icrons in diameter) to the at	mosphere shall		
	exceed 0.058 pounds per hour, nor more than 0.25 tons per 12-month		1		
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall no				
	exceed 0.0087 pounds per hour, nor more than 0.038 tons per 12-month rolling period.				
	d. NAC 445B.22017 – The opacity from PF1.034 , PF1.043 and PF1.044 , each, shall not equal or exceed 20 percent.				
	e. NAC 445B.22033 – The maximum allowable discharge of PM ₁₀ to the atmosphere from PF1.034 , PF1.043 ar				
	PF1.044, each, shall not exceed 41.3 pounds per hour.	Ĩ	,		
4.	Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)				
	The Permittee, upon the issuance of this operating permit, shall maintain,	in a contemporaneous log, the	he monitoring a		
	recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. A				
	specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day				
	operation for the month, as appropriate.		,		
	a. Monitor and record the throughput for PF1.034 , PF1.043 and PF1.04	4. each. for each calendar day	ν.		
	b. Monitor and record the hours of operation for PF1.034 , PF1.043 and D				
	c. Record the corresponding average hourly throughput rate in tons per he determined from the total daily throughput and the total daily hours of	our. The average hourly throu			
	d. Record the throughput rate of material (in tons) on a cumulative month		olling period		
	 e. Conduct and record an observation of visible emissions (excluding water 				
	basis while operating. The observer shall stand at a distance sufficient				
	sun oriented to their back. If visible emissions are observed, the Permi	1			
	emission test. Each Method 9 visible emission test shall be conduc				
		-			
	accordance with 40 CFR Part 60, Appendix A. The Permittee shall m				
	recordkeeping: the calendar date of any required monitoring, results of	the weekly visible emissions,	and any correct		
	actions taken.	h	a di sa di sa si		
	f. Inspect the enclosure installed on PF1.034 , PF1.043 and PF1.044 , each				
	is in place and functioning properly. If the enclosure is in disrepair, the	Permittee shall perform corre	ective action wit		
	24 hours to ensure that the enclosure is functioning properly.				
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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BG. Emission Unit PF1.045

System 28D Lime Handling (Finich Mill #1)		Location UTM (Z	one 11, NAD 83)
System 28D – Lime Handling (Finish Mill #1)		m North	m East
PF1.045	Loader transfer to Feed Hopper #2 [Feed Hopper transfer to Rotary Feeder is 100% Fully Enclosed]	4,388,081	305,698
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.045 shall be controlled by a Building Enclosure .		
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.045 shall not exceed 35.0 t calendar day. <u>Hours</u> (1) PF1.045 may operate a total of 24 hours per day. 	ons of lime per hou	r, averaged over a
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the PF1.045 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.1 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in exceed 0.058 pounds per hour, nor more than 0.25 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in exceed 0.0087 pounds per hour, nor more than 0.038 tons per 12-month rolling d. NAC 445B.22017 – The opacity from PF1.045 shall not equal or exceed 20 period. d. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere pounds per hour. 	12 pounds per hour, a diameter) to the atre- period. a diameter) to the atra period. rcent.	nor more than 0.53 nosphere shall not mosphere shall not
4.	 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contrecordkeeping specified in this section. All records in the log must be identified wis specified records shall be entered into the log at the end of the shift, end of the day of operation for the month, as appropriate. a. Monitor and record the throughput for PF1.045 for each calendar day. b. Monitor and record the hours of operation for PF1.045 for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation d. Record the throughput rate of material (in tons) on a cumulative monthly basis, e. Conduct and record an observation of visible emissions (excluding water vapor) basis while operating. The observer shall stand at a distance sufficient to provide the sun oriented to their back. If visible emission test shall be conducted by accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in recordkeeping: the calendar date of any required monitoring, results of the week actions taken. 	th the calendar date operation, or the end average hourly throun for each 12-month r on the building encl ide a clear view of e shall conduct and r y a certified visible en a contemporaneous	of the record. All of the final day of aghput rate shall be olling period. Iosure on a weekly the emissions with record a Method 9 emissions reader in s log the following
	 f. Inspect the enclosure installed on PF1.045 on a weekly basis to confirm that the properly. If the enclosure is in disrepair, the Permittee shall perform corrective a enclosure is functioning properly. 	1	Ũ
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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BH. Emission Unit PF1.046

System 28E – Lime Handling (Finish Mill #2 and/or #3)		Location UTM (Zone 11, NAD 8	
		m North	m East
PF1.046	Loader transfer to Feed Hopper #3 [Feed Hopper transfer to Rotary Feeder is 100% Fully Enclosed]	4,388,081	305,698
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.046 shall be controlled by a Building Enclosure .		
2.	Operating Parameters (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.046 shall not exceed 35.0 to calendar day. b. Hours (1) PF1.046 may operate a total of 24 hours per day.	ons of lime per hou	r, averaged over a
3.	 Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the PF1.046 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.1 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in exceed 0.058 pounds per hour, nor more than 0.25 tons per 12-month rolling per c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in exceed 0.0087 pounds per hour, nor more than 0.038 tons per 12-month rolling d. NAC 445B.22017 – The opacity from PF1.046 shall not equal or exceed 20 per e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphere pounds per hour. 	2 pounds per hour, i diameter) to the atr riod. diameter) to the atr period. rcent.	nor more than 0.53 nosphere shall not nosphere shall not
4.	 pounds per hour. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. a. Monitor and record the throughput for PF1.046 for each calendar day. b. Monitor and record the hours of operation for PF1.046 for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period. e. Conduct and record an observation of visible emissions (excluding water vapor) on the building enclosure on a weekly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emission sets shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordaceping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken. f. Inspect the enclosure installed on PF1.046 on a weekly basis to confirm that the enclosure is in place and functioning properly. If the enclosure is in disrepair, the Permittee shall perform corrective action within 24 hours to ensure that the 		
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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BI. Emission Unit S2.128

System 28F – Lime Handling		Location UTM (Zone 1)	
		m North	m East
S2.128	Truck Unloading to Lime Tank	4,387,938	305,795

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

 a. Emissions from S2.128 shall be controlled by Baghouse (DC-LIMEBV).
 <u>Descriptive Stack Parameters</u> Stack Height: 51.4 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient Exhaust Flow: 1,400.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

a. The maximum allowable throughput rate for **S2.128** shall not exceed **70.0** tons of **lime** per hour, averaged over a calendar day, nor more than **613,200.0** tons per 12-month rolling period.

b. <u>Hours</u> (1) **S2.128** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse (DC-LIMEBV)** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.053** pounds per hour, nor more than **0.23** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.053 pounds per hour, nor more than 0.23 tons per 12-month rolling period.
- c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.053** pounds per hour, nor more than **0.23** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse (DC-LIMEBV)** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of PM_{10} to the atmosphere from S2.128 shall not exceed 47.8 pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.128** for each calendar day.
- b. Monitor and record the hours of operation for **S2.128** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record a Method 9 visible emission test on the baghouse controlling **S2.128** on a **weekly** basis while operating. Each Method 9 visible emission test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.128** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BJ. Emission Unit S2.130

votom 3	0 – Pony Motor #1	Location UTM (Zone 11, NAD 82			
ystem 5	$\mathbf{U} = \mathbf{F} \mathbf{O} \mathbf{H} \mathbf{y} \mathbf{W} \mathbf{O} \mathbf{O} \mathbf{U} \mathbf{H} 1$	m North	m East		
2.130	Emergency Kiln Drive Engine (Deutz 74 hp, Model No. BF 4L 2011, Serial No. 10128580, Manufactured 02/2006)	4,388,011	305,773		
1.	Air Pollution Control Equipment (NAC 445B.3405)a.S2.130 has no add-on controls.b.Descriptive Stack Parameters Stack Height: 10.0 feet Stack Diameter: 0.12 feet Stack Temperature: 750 °F				
2.	Operating Parameters (NAC 445B.3405) a. S2.130 may consume only diesel. b. Descriptive Operating Parameters (1) Maximum Fuel Consumption Rate: 3.70 gallons per hour c. Hours	iod of non-emergen	cy use. There is		
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)				
	The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the standard st				
	S2.130 the following pollutants in excess of the following specified limits:	0.017 nounds nor h	our nor more t		
	a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.017 pounds per hour, nor more th 0.00085 tons per 12-month rolling period.				
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall r				
	exceed 0.017 pounds per hour, nor more than 0.00085 tons per 12-month rolling period.				
	c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in exceed 0.017 pounds per hour, nor more than 0.00085 tons per 12-month rollin	g period.	-		
	d. The discharge of SO ₂ (sulfur dioxide) to the atmosphere shall not exceed 0.15 tons per 12-month rolling period.				
	e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not excee 0.044 tons per 12-month rolling period.				
	f. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 0.15 tons per 12-month rolling period.				
	g. The discharge of VOCs (volatile organic compounds) to the atmosphere shall more than 0.0091 tons per 12-month rolling period.	_	ounds per hour,		
	h. NAC 445B.22017 – The opacity from the S2.0130 shall not equal or exceed 20		11		
	i. NAC 445B.22047 – The maximum allowable discharge of sulfur to the atmosp pounds per hour.	ohere from S2.130 sh	all not exceed (



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BJ. Emission Unit S2.130 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the total daily hours of operation for **S2.130** for each day of operation. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- b. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- c. Maintain purchase records of diesel to determine fuel consumption rate for **S2.130** for each calendar month.

6. <u>Federal Requirements</u>

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary Reciprocating Internal Combustion Engines

- a. <u>Emissions Limitations, Management Practices and Other Requirements</u> (40 CFR 63.6603(a), Table 2d) For each Emergency stationary CI RICE and black start stationary CI RICE, the Permittee must meet the following requirement, except during periods of startup:
 - (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- b. <u>Fuel Requirements</u> (40 CFR 63.6604)

The Permittee must meet the following diesel requirements for non-road engine (40 CFR 63.6604, 80.510(b)):

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) Cetane index or aromatic content as follows:
 - (a) A minimum cetane index of 40; or
 - (b) A maximum aromatic content of 35 volume percent.
- c. <u>Monitoring, Installation, Collection, Operation, Maintenance Requirements (40 CFR 63.6625)</u>
 - (1) The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))
 - (2) The Permittee must install a non-resettable hour meter if one is not already installed. (40 CFR 63.6625(f))
 - (3) The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in **BJ.5.a.** of this section. (40 CFR 63.6625(h))



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Section IV. Specific Operating Conditions (continued)

BJ. Emission Unit S2.130 (continued)

C.

- <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> <u>Reciprocating Internal Combustion Engines</u> (continued)
 - Monitoring, Installation, Collection, Operation, Maintenance Requirements (40 CFR 63.6625) (continued)
 - (4) The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in **BJ.5.a.(1)** of this section. The oil analysis must be performed at the same frequency specified for changing the oil in **BJ.5.a.(1)** of this section. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))
 - d. <u>Compliance Requirements</u> (40 CFR 63.6605, 63.6640, Table 6)
 - (1) The Permittee must be in compliance with the emission limitations, operating limitations, and other requirements in Subpart ZZZZ that apply at all times. (40 CFR Part 63.6605(a))
 - (2) The Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR Part 63.6605(b))
 - (3) Permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in **BJ.5.a.** of this section according to methods specified below (40 CFR 63.6640(a), Table 6):
 - (a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
 - (b) Develop and follow Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BJ. Emission Unit S2.130 (continued)

- <u>Federal Requirements</u> (continued)
 <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ for Stationary</u> Reciprocating Internal Combustion Engines (continued)
 - d. <u>Compliance Requirements</u> (40 CFR 63.6605, 63.6640, Table 6) (continued)
 - (4) The Permittee must operate the emergency stationary RICE according to the requirements in BJ.5.d.(4)(a) through (c) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in BJ.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee does not operate the engine according to the requirements in BJ.5.d.(4)(a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 63.6640(f))
 - (a) There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
 - (b) The Permittee may operate their emergency stationary RICE for any combination of the purposes specified in **BJ.5.d.(4)(b)(i)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **BJ.5.d.(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 63.6640(f)(2))
 - i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))
 - (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in **BJ.5.d.(4)(b)** of this section. Except as provided in **BJ.5.d.(4)(c)(i) and (ii)** of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(4))
 - i. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. (40 CFR 63.6640(f)(4)(i))
 - ii. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 63.6640(f)(4)(ii)(A) through (E) are met. (40 CFR 63.6640(f)(4)(ii))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BJ. Emission Unit S2.130 (continued)

e.

- <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> <u>Reciprocating Internal Combustion Engines</u> (continued)
 - Recordkeeping Requirements (40 CFR Part 63.6655)
 - The Permittee must keep the following records:
 - (1) A copy of each notification and report that the Permittee submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirement in 40 CFR Part 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
 - (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
 - (3) Records of performance tests and performance evaluations as required in 40 CFR Part 63.10(b)(2)(viii). (40 CFR 63.6655(a)(3))
 - (4) Records of all required maintenance performed on the RICE and any air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with **BJ.5.d.(2)** of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))
 - (6) The Permittee must keep the records required in with **BJ.5.d.(3)** of this section to show continuous compliance with each emission or operating limitation that applies. (40 CFR 63.6655(d))
 - (7) The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to their own maintenance plan. (40 CFR 63.6655(e))
 - (8) The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR Part 63.6640(f)(2)(ii) or (iii), or 40 CFR Part 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))



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Section IV. Specific Operating Conditions (continued)

BK. Emission Unit S2.131

System 3	1 – Pony Motor 2	Location UTM (Z	one 11, NAD 83
		m North m East	
52.131	Emergency Kiln Drive (Duetz 60.8 hp, Model No. F4L 2011, Serial No. 00847623, Manufactured 02/2006)	4,388,017	305,790
1.	Air Pollution Control Equipment (NAC 445B.3405) a. S2.131 has no add-on controls. b. Descriptive Stack Parameters Stack Height: 10.0 feet Stack Diameter: 0.12 feet Stack Temperature: 750 °F		
2.	Operating Parameters (NAC 445B.3405) a. S2.131 may consume only diesel. b. Descriptive Operating Parameters (1) Maximum Fuel Consumption Rate: 3.04 gallons per hour c. Hours	non-emergency us	e. There is no ti
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the s2.131 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.13 tons per 12-month rolling period. 	-	-
	 b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in exceed 0.13 pounds per hour, nor more than 0.0067 tons per 12-month rolling per period. 		mosphere shall
	c. The discharge of PM _{2.5} (particulate matter less than or equal to 2.5 microns in 3exceed 0.13 pounds per hour, nor more than 0.0067 tons per 12-month rolling p	period.	
	d. The discharge of SO ₂ (sulfur dioxide) to the atmosphere shall not exceed 0.12 p tons per 12-month rolling period.	-	
	e. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed 0.043 tons per 12-month rolling period.		
	f. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 0.41 tons per 12-month rolling period.		
	g. The discharge of VOCs (volatile organic compounds) to the atmosphere shall more than 0.0076 tons per 12-month rolling period.		ounds per hour,
	h. NAC 445B.22017 – The opacity from the S2.131 shall not equal or exceed 20 p		
	i. NAC 445B.22047 – The maximum allowable discharge of sulfur to the atmosph pounds per hour.	here from S2.131 sh	all not exceed 0



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BK. Emission Unit S2.131 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the total daily hours of operation for **S2.131** for each day of operation. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- b. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- c. Maintain purchase records of diesel to determine fuel consumption rate for **S2.131** for each calendar month.

5. <u>Federal Requirements</u>

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary Reciprocating Internal Combustion Engines

- a. <u>Emissions Limitations, Management Practices and Other Requirements</u> (40 CFR 63.6603(a), Table 2d) For each Emergency stationary CI RICE and black start stationary CI RICE, the Permittee must meet the following requirement, except during periods of startup:
 - (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- b. <u>Fuel Requirements</u> (40 CFR 63.6604)

The Permittee must meet the following diesel requirements for non-road engine (40 CFR 63.6604, 80.510(b)):

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) Cetane index or aromatic content as follows:
 - (a) A minimum cetane index of 40; or
 - (b) A maximum aromatic content of 35 volume percent.
- c. <u>Monitoring, Installation, Collection, Operation, Maintenance Requirements (40 CFR 63.6625)</u>
 - (1) The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))
 - (2) The Permittee must install a non-resettable hour meter if one is not already installed. (40 CFR 63.6625(f))
 - (3) The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in **BK.5.a.** of this section. (40 CFR 63.6625(h))



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BK. Emission Unit S2.131 (continued)

C.

- <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> <u>Reciprocating Internal Combustion Engines</u> (continued)
 - Monitoring, Installation, Collection, Operation, Maintenance Requirements (40 CFR 63.6625) (continued)
 - (4) The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in **BK.5.a.(1)** of this section. The oil analysis must be performed at the same frequency specified for changing the oil in **BK.5.a.(1)** of this section. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))
 - d. <u>Compliance Requirements</u> (40 CFR 63.6605, 63.6640, Table 6)
 - (1) The Permittee must be in compliance with the emission limitations, operating limitations, and other requirements in Subpart ZZZZ that apply at all times. (40 CFR Part 63.6605(a))
 - (2) The Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR Part 63.6605(b))
 - (3) Permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in **BK.5.a.** of this section according to methods specified below (40 CFR 63.6640(a), Table 6):
 - (a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
 - (b) Develop and follow Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BK. Emission Unit S2.131 (continued)

- <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> Reciprocating Internal Combustion Engines (continued)
 - d. <u>Compliance Requirements</u> (40 CFR 63.6605, 63.6640, Table 6) (continued)
 - (4) The Permittee must operate the emergency stationary RICE according to the requirements in BK.5.d.(4)(a) through (c) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in BK.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee does not operate the engine according to the requirements in BK.5.d.(4)(a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 63.6640(f))
 - (a) There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
 - (b) The Permittee may operate their emergency stationary RICE for any combination of the purposes specified in **BK.5.d.(4)(b)(i)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **BK.5.d.(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 63.6640(f)(2))
 - i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))
 - (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in **BK.5.d.(4)(b)** of this section. Except as provided in **BK.5.d.(4)(c)(i) and (ii)** of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(4))
 - i. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. (40 CFR 63.6640(f)(4)(i))
 - ii. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 63.6640(f)(4)(ii)(A) through (E) are met. (40 CFR 63.6640(f)(4)(ii))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BK. Emission Unit S2.131 (continued)

e.

- 5. <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> <u>Reciprocating Internal Combustion Engines</u> (continued)
 - Recordkeeping Requirements (40 CFR Part 63.6655)
 - The Permittee must keep the following records:
 - (2) A copy of each notification and report that the Permittee submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirement in 40 CFR Part 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
 - (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
 - (3) Records of performance tests and performance evaluations as required in 40 CFR Part 63.10(b)(2)(viii). (40 CFR 63.6655(a)(3))
 - (4) Records of all required maintenance performed on the RICE and any air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with **BK.5.d.(2)** of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))
 - (6) The Permittee must keep the records required in with **BK.5.d.(3)** of this section to show continuous compliance with each emission or operating limitation that applies. (40 CFR 63.6655(d))
 - (7) The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to their own maintenance plan. (40 CFR 63.6655(e))
 - (8) The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR Part 63.6640(f)(2)(ii) or (iii), or 40 CFR Part 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BL. Emission Unit S2.132

System 3	2 – Portable Generator		Zone 11, NAD 83) m East
		m North	
S2.132	Emergency Generator (CAT 227 hp, Model 3306 PCT, Serial 66D32021, Manufactured 1979)	4,388,012	305,651
1.	Air Pollution Control Equipment (NAC 445B.3405)a.S2.132 has no add-on controls.b.Descriptive Stack Parameters Stack Height: 35.0 feet Stack Diameter: 0.33 feet Stack Temperature: 750 °F		
2.	Operating Parameters (NAC 445B.3405) a. S2.132 may consume only diesel. b. Descriptive Operating Parameters (1) Maximum Fuel Consumption Rate: 11.4 gallons per hour c. Hours 	od of non-emergency u	se. There is no tim
3.	 Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cau S2.132 the following pollutants in excess of the following specified limits: a. The discharge of PM (particulate matter) to the atmosphere shall not exceed tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microm exceed 0.14 pounds per hour, nor more than 0.0071 tons per 12-month rolli c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microm exceed 0.14 pounds per hour, nor more than 0.0071 tons per 12-month rolli d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0 tons per 12-month rolling period. e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed tons per 12-month rolling period. f. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed tons per 12-month rolling period. g. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed tons per 12-month rolling period. 	 0.14 pounds per hour, n s in diameter) to the ang period. us in diameter) to the ang period. 0.47 pounds per hour, n ceed 2.92 pounds per l 0.79 pounds per hour, n 	or more than 0.007 tmosphere shall no tmosphere shall no nor more than 0.02 nour, nor more than nor more than 0.04
	 h. NAC 445B.22017 – The opacity from the S2.132 shall not equal or exceed i. NAC 445B.22047 – The maximum allowable discharge of sulfur to the atm pounds per hour. 		hall not exceed 1.1



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BL. Emission Unit S2.132 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the total daily hours of operation for **S2.132** for each day of operation. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- b. Record the monthly hours of operation and the corresponding annual hours of operation for each 12-month rolling period. The monthly hours of operation shall be determined at the end of each month as the sum of daily hours of operation for each day of the month. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for each 12-month rolling period.
- c. Maintain purchase records of diesel to determine fuel consumption rate for **S2.132** for each calendar month.

5. <u>Federal Requirements</u>

National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary Reciprocating Internal Combustion Engines

- a. <u>Emissions Limitations, Management Practices and Other Requirements</u> (40 CFR 63.6603(a), Table 2d) For each Emergency stationary CI RICE and black start stationary CI RICE, the Permittee must meet the following requirement, except during periods of startup:
 - (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- b. <u>Fuel Requirements</u> (40 CFR 63.6604)

The Permittee must meet the following diesel requirements for non-road engine (40 CFR 63.6604, 80.510(b)):

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) Cetane index or aromatic content as follows:
 - (a) A minimum cetane index of 40; or
 - (b) A maximum aromatic content of 35 volume percent.
- c. <u>Monitoring, Installation, Collection, Operation, Maintenance Requirements (40 CFR 63.6625)</u>
 - (1) The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))
 - (2) The Permittee must install a non-resettable hour meter if one is not already installed. (40 CFR 63.6625(f))
 - (3) The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in **BL.5.a.** of this section. (40 CFR 63.6625(h))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BL. Emission Unit S2.132 (continued)

C.

- <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> <u>Reciprocating Internal Combustion Engines</u> (continued)
 - Monitoring, Installation, Collection, Operation, Maintenance Requirements (40 CFR 63.6625) (continued)
 - (4) The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in **BL.5.a.(1)** of this section. The oil analysis must be performed at the same frequency specified for changing the oil in **BL.5.a.(1)** of this section. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))
 - d. <u>Compliance Requirements</u> (40 CFR 63.6605, 63.6640, Table 6)
 - (1) The Permittee must be in compliance with the emission limitations, operating limitations, and other requirements in Subpart ZZZZ that apply at all times. (40 CFR Part 63.6605(a))
 - (2) The Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR Part 63.6605(b))
 - (3) Permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in **BL.5.a.** of this section according to methods specified below (40 CFR 63.6640(a), Table 6):
 - (a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
 - (b) Develop and follow Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BL. Emission Unit S2.132 (continued)

- <u>Federal Requirements</u> (continued)
 <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ for Stationary</u> Reciprocating Internal Combustion Engines (continued)
 - d. <u>Compliance Requirements</u> (40 CFR 63.6605, 63.6640, Table 6) (continued)
 - (4) The Permittee must operate the emergency stationary RICE according to the requirements in BL.5.d.(4)(a) through (c) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in BL.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee does not operate the engine according to the requirements in BL.5.d.(4)(a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 63.6640(f))
 - (a) There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
 - (b) The Permittee may operate their emergency stationary RICE for any combination of the purposes specified in **BL.5.d.(4)(b)(i)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **BL.5.d.(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 63.6640(f)(2))
 - i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))
 - (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in **BL.5.d.(4)(b)** of this section. Except as provided in **BL.5.d.(4)(c)(i) and (ii)** of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(4))
 - i. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. (40 CFR 63.6640(f)(4)(i))
 - ii. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 63.6640(f)(4)(ii)(A) through (E) are met. (40 CFR 63.6640(f)(4)(ii))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BL. Emission Unit S2.132 (continued)

e.

- 5. <u>Federal Requirements</u> (continued) <u>National Emissions Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart ZZZZ – for Stationary</u> <u>Reciprocating Internal Combustion Engines</u> (continued)
 - Recordkeeping Requirements (40 CFR Part 63.6655)
 - The Permittee must keep the following records:
 - (3) A copy of each notification and report that the Permittee submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirement in 40 CFR Part 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
 - (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
 - (3) Records of performance tests and performance evaluations as required in 40 CFR Part 63.10(b)(2)(viii). (40 CFR 63.6655(a)(3))
 - (4) Records of all required maintenance performed on the RICE and any air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with **BL.5.d.(2)** of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))
 - (6) The Permittee must keep the records required in with **BL.5.d.(3)** of this section to show continuous compliance with each emission or operating limitation that applies. (40 CFR 63.6655(d))
 - (7) The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to their own maintenance plan. (40 CFR 63.6655(e))
 - (8) The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR Part 63.6640(f)(2)(ii) or (iii), or 40 CFR Part 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BM. Emission Unit S2.133

System 33 – Unleaded Fuel Tank		Location UTM (Z	Location UTM (Zone 11, NAD 83)	
		m North	m East	
S2.133	Unleaded Fuel Tank (3,000 gallons)	4,388,020	305,776	

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from **S2.133** shall be controlled by submerged fill.
- b. <u>Descriptive Stack Parameters</u> Shell Diameter: 13.0 feet Shell Height: 5.0 feet Capacity: 3,000.0 gallons

2. Operating Parameters (NAC 445B.3405)

- a. **S2.133** shall only be used to store **gasoline**.
- b. The maximum allowable throughput rate for **S2.133** shall not exceed **1,260,936.7** gallons per month, nor more than **15,131,240.0** gallons per 12-month rolling period.

c. <u>Hours</u> S2.133 may operate a total of 24 hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **S2.133** the following pollutants in excess of the following specified limits:

- a. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.37** tons per year.
- b. NAC 445B.22017 The opacity from **S2.133** shall not equal or exceed **20** percent.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput of **gasoline**, in gallons, loaded into, or dispensed from, **S2.133**, on a monthly basis, as determined from vendor invoices for tank loading or fuel pump non-resettable meter for tank dispensing.
- b. Monitor and record the 12-month rolling throughput rate in gallons per year. The annual throughput shall be determined at the end of each month as the sum of the monthly throughput rates for the year for all previous months of that year.

5. <u>Federal Requirements</u>

National Emission Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart CCCCCC – for Gasoline Dispensing Facilities

a. Permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.11115)



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BM. Emission Unit S2.133 (continued)

- <u>Federal Requirements</u> (continued) <u>National Emission Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart CCCCCC – for Gasoline</u> <u>Dispensing Facilities</u> (continued)
 - b. Permittee must not allow **gasoline** to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize **gasoline** spills. (40 CFR 63.11116(a)(1))
 - (2) Clean up spills as expeditiously as practicable. (40 CFR 63.11116(a)(2))
 - (3) Cover all open **gasoline** containers and all **gasoline** storage tank fill-pipes with a gasketed seal when not in use. (40 CFR 63.11116(a)(3))
 - (4) Minimize **gasoline** sent to open waste collection systems that collect and transport **gasoline** to reclamation and recycling devices, such as oil/water separators. (40 CFR 63.11116(a)(4))
 - c. Except as specified in 40 CFR 63.11117(c), the Permittee must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in 40 CFR 63.11132, and as specified in 40 CFR 63.11117(b)(1), (b)(2), or (b)(3). The applicable distances in 40 CFR 63.11117(b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank. (40 CFR 63.11117(b))
 - (1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank. (40 CFR 63.11117(b)(1))
 - (2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank. (40 CFR 63.11117(b)(2))
 - (3) Submerged fill pipes not meeting the specifications of 40 CFR 63.11117(b)(1) or (b)(2) are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit. (40 CFR 63.11117(b)(3))
 - (4) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in 40 CFR 63.11117(b), but must comply only with all of the requirements in 40 CFR 63.11116. (40 CFR 63.11117(c))
 - (5) Permittee must have records available within 24 hours of a request by the Administrator to document your **gasoline** throughput. (40 CFR 63.11117(d))
 - (6) Permittee must submit the applicable notifications as required under 40 CFR 63.11124(a). (40 CFR 63.1117(e))
 - (7) Permittee must comply with the requirements of this subpart by the applicable dates contained in 40 CFR 63.11113. (40 CFR 63.11117(f))
 - d. Except as specified in 40 CFR 63.11118(c), the Permittee must meet the requirements in either 40 CFR 63.11118(b)(1) or (b)(2). (40 CFR 63.11118(b))
 - (1) Each management practice in Table 1 to this subpart that applies to your GDF. (40 CFR 63.11118(b)(1))
 - (2) If, prior to January 10, 2008, you satisfy the requirements in both 40 CFR 63.11118(b)(2)(i) and (ii), you will be deemed in compliance with this subsection. (40 CFR 63.11118(b)(2))
 - (a) You operate a vapor balance system at your GDF that meets the requirements of either 40 CFR 63.11118(b)(2)(i)(A) or (b)(2)(i)(B). (40 CFR 63.11118(b)(2)(i))
 - i. Achieves emissions reduction of at least 90 percent. (40 CFR 63.11118(b)(2)(i)(A))
 - ii. Operates using management practices at least as stringent as those in Table 1 to this subpart. (40 CFR 63.11118(b)(2)(i)(B))
 - (b) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either 40 CFR 63.11118(b)(2)(i)(A) or (b)(2)(i)(B).



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BM. Emission Unit S2.133 (continued)

- <u>Federal Requirements</u> (continued) <u>National Emission Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart CCCCCC – for Gasoline</u> Dispensing Facilities (continued)
 - e. The emission sources listed in 40 CFR 63.11118(c)(1) through (3) are not required to comply with the control requirements in 40 CFR 63.11118(b), but must comply with the requirements in 40 CFR 63.11117. (40 CFR 63.11118(b))
 - (1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008. (40 CFR 63.11118(c)(1))
 - (2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.
 (40 CFR 63.11118(c)(3))
 - (3) Gasoline storage tanks equipped with floating roofs, or the equivalent. (40 CFR 63.11118(c)(3))
 - f. Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart. (40 CFR 63.11118(d))
 - g. The Permittee must comply with the applicable testing requirements contained in 40 CFR 63.11120. (40 CFR 63.11118(e))
 - h. The Permittee must submit the applicable notifications as required under 40 CFR 63.11124. (40 CFR 63.11118(f))
 - i. The Permittee must keep records and submit reports as specified in 40 CFR 40 CFR 63.11125 and 63.11126. (40 CFR 63.11118(g))
 - j. The Permittee must comply with the requirements of this subpart by the applicable dates contained in 40 CFR 63.11113. (40 CFR 63.11118(h))
 - k. <u>Testing and Monitoring Requirements</u>
 - (1) The Permittee, at the time of installation, as specified in 40 CFR 63.11113(e), of a vapor balance system required under 40 CFR 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in 40 CFR 63.11120(a)(1) and (2). (40 CFR 63.11120(a))
 - (a) The Permittee must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in 40 CFR 63.11120(a)(1)(i) or (a)(1)(i). (40 CFR 63.11120(a)(1)(i))
 - (b) The Permittee must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in 40 CFR 63.11120(a)(2)(i), (a)(2)(ii), or (a)(2)(iii). (40 CFR 63.11120(a)(2))
 - (2) The Permittee choosing, under the provisions of 40 CFR 63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph 40 CFR 63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in 40 CFR 63.11120 (b)(1) through (3). (40 CFR 63.11120(b))
 - (a) The Permittee must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see 40 CFR 63.14). (40 CFR 63.11120(b)(1))
 - (b) The Permittee must, during the initial performance test required under 40 CFR 63.11120(b)(1), determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart. (40 CFR 63.11120(b)(2))
 - (c) The Permittee must comply with the testing requirements specified in 40 CFR 63.11120(a).



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BM. Emission Unit S2.133 (continued)

- <u>Federal Requirements</u> (continued) <u>National Emission Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63 Subpart CCCCCC – for Gasoline</u> <u>Dispensing Facilities</u> (continued)
 - k. <u>Testing and Monitoring Requirements</u> (continued)
 - (3) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. (40 CFR 63.11120(c))
 - (4) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in 40 CFR 63.11092(f). (40 CFR 63.11120(d))
 - 1. Notifications, Records, and Reports
 - (1) Each owner or operator subject to the control requirements in 40 CFR 63.11117 must comply with 40 CFR 63.11124(a)(1) through (3). (40 CFR 63.11124(a))
 - (2) Each owner or operator subject to the control requirements in 40 CFR 63.11118 must comply with 40 CFR 63.11124(b)(1) through (5). (40 CFR 63.11124(b))
 - m. <u>Recordkeeping Requirements</u>
 - (1) Each owner or operator subject to the management practices in 40 CFR 63.11118 must keep records of all tests performed under 40 CFR 63.11120(a) and (b). (40 CFR 63.11125(a))
 - (2) Records required under 40 CFR 63.11125(a) shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit. (40 CFR 63.11125(b))
 - (3) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in 40 CFR 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either 40 CFR 63.11125(c)(1) or (c)(2). (40 CFR 63.11125(c))
 - (4) Each owner or operator of an affected source under this subpart shall keep records as specified in 40 CFR 63.11125(d)(1) and (2). (40 CFR 63.11125(d))
 - n. <u>Reporting Requirements</u>
 - (1) Each owner or operator subject to the management practices in 40 CFR 63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under 40 CFR 63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing. (40 CFR 63.11126(a))
 - (2) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred. (40 CFR 63.11125(b))



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BN. Emission Units PF1.047 and PF1.048

System 244 Finish Mill #4 Dump to Honnor		Location UTM (Zone 11, NAD 83)	
System 34A – Finish Mill #4 - Dump to Hopper		m North m Ea	
PF1.047	Dump to Crane Weigh Hopper	4,388,081	305,698
PF1.048	Dump to Front End Loader Weigh Hopper	4,388,081	305,698
1.	<u>Air Pollution Control Equipment</u> (NAC 445B.3405) Emissions from PF1.047 and PF1.048 shall be controlled by a Building Enclosure .		
2	Quere 1 (NA Q 445D 2405)		
2.	Operating Parameters (NAC 445B.3405) a. The maximum allowable throughput rate for PF1.047 and PF1.048, combined pozzolan, limestone, cement kiln dust, fly ash, and gypsum per hour, average 613,200.0 tons per 12-month rolling period. b. Hours (1) (1) PF1.047 and PF1.048, each, may operate a total of 24 hours per day.		
3.	 Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause to PF1.047 and PF1.048, combined, the following pollutants in excess of the following a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0. tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in exceed 0.083 pounds per hour, nor more than 0.17 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in exceed 0.012 pounds per hour, nor more than 0.026 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from PF1.047 and PF1.048 shall not equal or e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atm combined, shall not exceed 55.4 pounds per hour. 	specified limits: 23 pounds per hour, 1 n diameter) to the atr eriod. n diameter) to the atr period. r exceed 20 percent.	nor more than 0.4 nosphere shall n nosphere shall n
4.	 <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a conrecordkeeping specified in this section. All records in the log must be identified with specified records shall be entered into the log at the end of the shift, end of the day of operation for the month, as appropriate. a. Monitor and record the throughput for PF1.047 and PF1.048, each, for each cate b. Monitor and record the hours of operation for PF1.047 and PF1.048, each, for each cate determined from the total daily throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation d. Record the throughput rate of material, in tons, on a cumulative monthly basis, e. Conduct and record an observation of visible emissions (excluding water vapor) basis while operating. The observer shall stand at a distance sufficient to provid sun oriented to their back. If visible emissions are observed and exceed the approximation of the shall conduct and record a Method 9 visible emission test. Each Method 9 visible emissions reader in accordance with 40 CFR Part 60, Append contemporaneous log the following recordkeeping: the calendar date of any recover visible emissions, and any corrective actions taken. 	ith the calendar date operation, or the end alendar day. each calendar day. average hourly throu n. for each 12-month ro o on the building encl le a clear view of the plicable opacity stand le emission test shall ix A. The Permittee quired monitoring, res	of the record. A of the final day of ghput rate shall b olling period. osure on a weekl emissions with th dard, the Permitte be conducted by shall maintain in sults of the weekl
	f. Inspect the enclosure installed on PF1.047 and PF1.048 on a weekly basis to confunctioning properly. If the enclosure is in disrepair, the Permittee shall perform ensure that the enclosure is functioning properly.		
	D 207		



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BN. Emission Units PF1.047 and PF1.048 (continued)

<u>Federal Requirements</u> <u>Prevent of Significant Deterioration of Air Quality (PSD) – 40 CFR Part 52.21</u> The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in <u>Section IX</u> of this operating permit.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BO. Emission Units S2.134 and S2.135

System 34B – Finish Mill #4 (Pozzolan Truck Dump Baghouse #3)		Location UTM (Zone 11, NAD 83) m North m East	
•			m East
S2.134	Truck to Dump Hopper	4,388,186	305,628
S2.135	Truck Dump Hopper to Conveyor 8	4,388,186	305,628
1.	 <u>Air Pollution Control Equipment</u> (NAC 445B.3405) a. Emissions from S2.134 and S2.135 shall be controlled by Baghouse #3. b. <u>Descriptive Stack Parameters</u> Stack Height: 30.0 feet Stack Diameter: 1.5 feet Stack Temperature: Ambient Exhaust Flow: 4,527.0 dry standard cubic feet per minute (dscfm) 		
2.	Operating Parameters (NAC 445B.3405)a.The maximum allowable throughput rate for S2.134 and S2.135, each, spozzolan, limestone, cement kiln dust, fly ash, and gypsum per hour, aver613,200.0 tons per 12-month rolling period.b.Hours(1)S2.134 and S2.135, each, may operate a total of 24 hours per day.		
3.	 Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause th exhaust stack of Baghouse #3 the following pollutants in excess of the following spectrum a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0 tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns is exceed 0.11 pounds per hour, nor more than 0.48 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns exceed 0.11 pounds per hour, nor more than 0.48 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from the exhaust stack of Baghouse #3 shall e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmosphall not exceed 55.4 pounds per hour. 	ecified limits: 0.11 pounds per hour, 1 in diameter) to the atre- eriod. in diameter) to the atre- eriod. not equal or exceed 2	nor more than 0. nosphere shall r nosphere shall r 0 percent.
4.	 <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a corecordkeeping specified in this section. All records in the log must be identified with specified records shall be entered into the log at the end of the shift, end of the day of operation for the month, as appropriate. a. Monitor and record the throughput for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each, for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each for each calle b. Monitor and record the hours of operation for S2.134 and S2.135, each for each calle b. Monitor and record the total daily throughput and the total daily hours of operation for S2.134 and S2.135, each for each calle b. Monitor and the total daily hours of operation for S2.134 and S2.135, each for each calle b. Monitor and record the total daily throughput and the total daily hours of operation for S2.134 and S2.135,	with the calendar date f operation, or the end endar day. ach calendar day. e average hourly throu on.	of the record. A of the final day ghput rate shall



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BO. Emission Units S2.134 and S2.135 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.134** and **S2.135** on a weekly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.134 and S2.135** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.

6. <u>Federal Requirements</u>

Prevent of Significant Deterioration of Air Quality (PSD) - 40 CFR Part 52.21

The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BP. Emission Units S2.136 through S2.138

Swatam 2	System 34C – Finish Mill #4 (Conveyor to Bucket Elevator Baghouse #4)		Location UTM (Zone 11, NAD 83)	
System 54			m East	
S2.136	Conveyor 8 to Conveyor 1			
S2.137	Conveyor 9 to Bucket Elevator 2	4,388,087	305,669	
S2.138	Bucket Elevator 2 to Conveyor 1			

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from **S2.136 through S2.138** shall be controlled by **Baghouse #4**.
- b. <u>Descriptive Stack Parameters</u> Stack Height: 64.2 feet Stack Diameter: 1.5 feet Stack Temperature: Ambient Exhaust Flow: 2,263.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. The maximum allowable throughput rate for **S2.136 through S2.138, each,** shall not exceed **70.0** tons of **clinker**, **pozzolan, limestone, cement kiln dust, fly ash, and gypsum** per hour, averaged over a calendar day.
- b. <u>Hours</u>
 - (1) **S2.136 through S2.138, each,** may operate a total of **24** hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse #4** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.055** pounds per hour, nor more than **0.24** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.055 pounds per hour, nor more than 0.24 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.055 pounds per hour, nor more than 0.24 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse #4** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.136 through S2.138, each**, shall not exceed **47.8** pounds per hour.
- 4. <u>Monitoring, Recordkeeping, and Reporting (NAC 445B.3405)</u>

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.136 through S2.138, each,** for each calendar day.
- b. Monitor and record the hours of operation for **S2.136 through S2.138, each,** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BP. Emission Units S2.136 through S2.138 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.136 through S2.138** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.136 S2.138** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.

6. <u>Federal Requirements</u>

Prevent of Significant Deterioration of Air Quality (PSD) - 40 CFR Part 52.21

The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BQ. Emission Units S2.139 through S2.148

System 24D Finich Mill #4 (Conveyor Transfor Baghouse #2)		Location UTM (Z	Location UTM (Zone 11, NAD 83)	
System 54	System 34D – Finish Mill #4 (Conveyor Transfer Baghouse #2)		m East	
S2.139	Conveyor 1 to Conveyor 2		305,626	
S2.140	Conveyor 2 to Bin 1 Feed Conveyor			
S2.141	Conveyor 1 to Conveyor 3			
S2.142	Conveyor 3 to Bin 2 Feed Conveyor			
S2.143	Conveyor 1 to Conveyor 4	1 299 059		
S2.144	Conveyor 4 to Bin 3 Feed Conveyor	4,388,058		
S2.145	Conveyor 1 to Conveyor 5			
S2.146	Conveyor 5 to Bin 4 Feed Conveyor			
S2.147	Conveyor 1 to Conveyor 6			
S2.148	Conveyor 6 to Bin 5 Feed Conveyor			

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

- a. Emissions from **S2.139 through S2.148** shall be controlled by **Baghouse #2**.
- b. <u>Descriptive Stack Parameters</u> Stack Height: 100.0 feet Stack Diameter: 1.25 feet Stack Temperature: Ambient Exhaust Flow: 4,527.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. The maximum allowable throughput rate for S2.139 through S2.148, each, shall not exceed 150.0 tons of clinker, pozzolan, limestone, cement kiln dust, fly ash, and gypsum per hour, averaged over a calendar day, nor more than 613,200.0 tons per 12-month rolling period.
- b. <u>Hours</u>
 - (1) S2.139 through S2.148, each, may operate a total of 24 hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of **Baghouse #2** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.11** pounds per hour, nor more than **0.48** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.11 pounds per hour, nor more than 0.48 tons per 12-month rolling period.
- c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.11 pounds per hour, nor more than 0.48 tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse #2** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.139 through S2.148, each**, shall not exceed **55.4** pounds per hour.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BQ. Emission Units S2.139 through S2.148 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.139 through S2.148**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.139 through S2.148, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material, in tons, on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.139 through S2.148** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.139 through S2.148** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1)) The Dermittee upon issuance of this operating permit shall conduct and record renewal perfe

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- 6. Federal Requirements

Prevent of Significant Deterioration of Air Quality (PSD) - 40 CFR Part 52.21

The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BR. Emission Units S2.149 through S2.164

System 34E – Finish Mill #4 (Feed Mill Bins Baghouse #1)		Location UTM (2	Location UTM (Zone 11, NAD 83)	
System 34	System 54E – Finish Mini #4 (Feed Mini Dins Dagnouse #1)		m East	
S2.149	Bin 1 Feed Conveyor to Bin 1			
S2.150	Bin 2 Feed Conveyor to Bin 2			
S2.151	Bin 3 Feed Conveyor to Bin 3			
S2.152	Bin 4 Feed Conveyor to Bin 4			
S2.153	Bin 5 Feed Conveyor to Bin 5			
S2.154	Bin 1 to Weigh Feeder 1		205 622	
S2.155	Weigh Feeder 1 to Conveyor 7			
S2.156	Bin 2 to Weigh Feeder 2	1 200 071		
S2.157	Weigh Feeder 2 to Conveyor 7	4,388,074	305,623	
S2.158	Bin 3 to Weigh Feeder 3			
S2.159	Weigh Feeder 3 to Conveyor 7			
S2.160	Bin 4 to Weigh Feeder 4			
S2.161	Weigh Feeder 4 to Conveyor 7			
S2.162	Bin 5 to Weigh Feeder 5			
S2.163	Weigh Feeder 5 to Conveyor 7			
S2.164	Conveyor 7 to Bucket Elevator 1			

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

a. Emissions from **S2.149 through S2.164** shall be controlled by **Baghouse #1**.

- b. <u>Descriptive Stack Parameters s</u> Stack Height: 100.0 feet Stack Diameter: 1.25 feet Stack Temperature: Ambient Exhaust Flow: 4,527.0 dry standard cubic feet per minute (dscfm)
- 2. Operating Parameters (NAC 445B.3405)
 - a. The maximum allowable throughput rate for S2.149 through S2.153, each, shall not exceed 150.0 tons of clinker, pozzolan, limestone, cement kiln dust, fly ash, and gypsum per hour, averaged over a calendar day.
 - b. The maximum allowable throughput rate for S2.154 through S2.164, each, shall not exceed 70.0 tons of clinker, pozzolan, limestone, lime, cement kiln dust, fly ash, and gypsum per hour, averaged over a calendar day.
 - c. <u>Hours</u>
 - (1) **S2.149 through S2.164, each,** may operate a total of **24** hours per day.



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BR. Emission Units S2.149 through S2.164 (continued)

- Emission Limits (NAC 445B.305, NAC 445B.3405)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse #1 the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.11** pounds per hour, nor more than **0.48** tons per 12-month rolling period.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.11 pounds per hour, nor more than 0.48 tons per 12-month rolling period.
 - c. The discharge of **PM**_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.11** pounds per hour, nor more than **0.48** tons per 12-month rolling period.
 - d. NAC 445B.22017 The opacity from the exhaust stack of **Baghouse #1** shall not equal or exceed **20** percent.
 - e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.149 through S2.164, each**, shall not exceed **55.4** pounds per hour.

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for S2.149 through S2.164, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.149 through S2.164, each,** for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.149 through S2.164** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.149 through S2.164** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BR. Emission Units S2.149 through S2.164 (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.

6. <u>Federal Requirements</u>

Prevent of Significant Deterioration of Air Quality (PSD) - 40 CFR Part 52.21

The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BS. Emission Units S2.165A through S2.167A

System 24E - Finish Mill #4 (Cohr. Dfoiffan Mill)		Location UTM (Zone 11, NAD 83	
System 34	ystem 34F – Finish Mill #4 (Gebr. Pfeiffer Mill)		m East
S2.165A	Bucket Elevator 1 to Finish Mill #4		
S2.166A	Finish Mill #4	4,388,095	305,616
S2.167A	Hot Gas Generator (22.185 MMBtu/hr)		
1.	Air Pollution Control Equipment (NAC 445B.3405)		
	a. Emissions from S2.165A through S2.167A shall be controlled by Baghou	180	
	b. <u>Descriptive Stack Parameters</u>		
	Stack Height: 100.0 feet		
	Stack Diameter: 2.92 feet		
	Stack Temperature: 206.6 °F		
	Exhaust Flow: 20,184.0 dry standard cubic feet per minute (dscfm)		
	Exhaust 1 low. 20,104.0 dry standard cubic feet per finnute (userin)		
2.	Operating Parameters (NAC 445B.3405)		
	a. S2.167A may consume only natural gas .		
	b. The maximum allowable fuel consumption rate for S2.167A shall not exc	ceed 21,749.5 standard	cubic feet (scf)
	hour, averaged over a calendar day.		
	c. The maximum allowable throughput rate for S2.165A and S2.166A, ea	ich, shall not exceed 70	0.0 tons of clink
	pozzolan, limestone, lime, gypsum, cement kiln dust, and fly ash per he	our, averaged over a cale	ndar day.
	d. <u>Hours</u>		
	(1) S2.165A through S2.167A, each, may operate a total of 24 hours	per day.	
3.	Emission Limits (NAC 445B.305, NAC 445B.3405)		
5.	The Permittee, upon issuance of this operating permit, shall not discharge or cause	e the discharge into the a	tmosphere from
	exhaust stack of the Baghouse the following pollutants in excess of the following		unosphere nom
	a. The discharge of PM (particulate matter) to the atmosphere shall not exceed		nor more than 2
	tons per 12-month rolling period.	cu 0.05 pounds per nour,	nor more than 2
	b. The discharge of \mathbf{PM}_{10} (particulate matter less than or equal to 10 micro	ne in diamatar) to the a	tmoenhora shall
	exceed 0.65 pounds per hour, nor more than 2.86 tons per 12-month rolling		inosphere shan
			tmoonhono choll
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 micro		unosphere shan
	exceed 0.65 pounds per hour, nor more than 2.86 tons per 12-month rolling		4 0 (
	d. The discharge of SO_2 (sulfur dioxide) to the atmosphere shall not exceed (0.013 pounds per nour, r	for more than 0.0
	tons per 12-month rolling period.	1104 1 1	
	e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not e.	xceed 1.34 pounds per f	iour, nor more th
	5.88 tons per 12-month rolling period.	14.02	1 0
	f. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed	ed 1.83 pounds per hour,	nor more than 8
	tons per 12-month rolling period.		
	g. The discharge of VOCs (volatile organic compounds) to the atmosphere	shall not exceed 0.12 p	ounds per hour,
	more than 0.52 tons per 12-month rolling period.		
	h. NAC 445B.22017 – The opacity from the exhaust stack of the Baghouse s		
	i. NAC 445B.2203 – The maximum allowable discharge of PM ₁₀ to the atmos	osphere from S2.167A sl	hall not exceed 0
	pounds per MMBtu.		
	j. NAC 445B.22047 – The maximum allowable discharge of sulfur to the	atmosphere from S2.167	A shall not exce
	15.5 pounds per hour.		
	k. NAC 445B.22033 – The maximum allowable discharge of PM ₁₀ to the atm	hosphere from S2.165A a	and S2.166A, ea
	shall not exceed 47.8 pounds per hour.	-	,
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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BS. Emission Units S2.165A through S2.167A (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. <u>Natural Gas</u>
 - (1) Monitor and record the consumption rate of **natural gas** for each calendar day for **S2.167A** (in **scf**) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in scf per hour) for **S2.167A** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Clinker, pozzolan, limestone, lime, gypsum, cement kiln dust, and fly ash</u>
 - (1) Monitor and record the throughput for **S2.165A and S2.166A**, each, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.165A and S2.166A**, each, using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.165A through S2.167A**, each, for each calendar day.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.165A through S2.167A** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.165A through S2.167A** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. <u>Specific Operating Conditions</u> (continued)

BS. Emission Units S2.165A through S2.167A (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following: (continued)

- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.
- 6. <u>Federal Requirements</u>
 - a. <u>Prevent of Significant Deterioration of Air Quality (PSD) 40 CFR Part 52.21</u> The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.
 - b. <u>Compliance Assurance Monitoring (CAM) (40 CFR 64.1, et.seq.)</u> The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on S2.165A through S2.167A, as listed in Table BS -1 below:

Table BS -1:					
Part 64 CAM Monitoring for the controls on S2.165A through S2.167A					
CAM Performance Indicator===>	CAM Performance Indicator===> Pressure Drop				
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.				
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.				
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.				
Verification of Operational Status Annually.					
Quality Assurance/Quality ControlThe gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.					
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.				
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.				
Averaging Periods	Instantaneous reading.				
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.				
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).				
Recordkeeping Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).					



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BT. Emission Units S2.165B through S2.167B

52.165B	F – Finish Mill #4 (Cemengal (FLS) Mill)		Zone 11, NAD 83	
	Bucket Elevator 1 to Finish Mill #4	m North	m East	
S2.166B	Finish Mill #4	4,388,095	305,616	
S2.167B	Hot Gas Generator (22.526 MMBtu/hr)	4,500,095	303,010	
52.107B				
1.	Air Pollution Control Equipment (NAC 445B.3405)			
	a. Emissions from S2.165B through S2.167B shall be controlled by Bagho	use.		
	b. <u>Descriptive Stack Parameters</u>			
	Stack Height: 100.0 feet			
	Stack Diameter: 2.92 feet			
	Stack Temperature: 199.4 °F			
	Exhaust Flow: 44,853.0 dry standard cubic feet per minute (dscfm)			
2.	Operating Parameters (NAC 445B.3405)			
2.	a. S2.167B may consume only natural gas .			
	 b. The maximum allowable fuel consumption rate for S2.167B shall not ex 	ceed 22 084 1 standard	cubic feet (scf) 1	
	hour, averaged over a calendar day.			
	c. The maximum allowable throughput rate for S2.165B and S2.166B , e	ach, shall not exceed 70	.0 tons of clink	
	pozzolan, limestone, lime, cement kiln dust, fly ash, and gypsum per h			
	d. <u>Hours</u>		liour ouj i	
	(1) S2.165B through S2.167B, each, may operate a total of 24 hours	s per day.		
2	Environment in the ALA CLAASE 205 NA CLAASE 2405			
3.	Emission Limits (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cau	as the discharge into the e	tmograhara from	
	exhaust stack of the Baghouse the following pollutants in excess of the following		unosphere nom	
			nor more than 6	
	a. The discharge of PM (particulate matter) to the atmosphere shall not excert tons per 12-month rolling period.	eeu 1.44 pounds per nour,		
	b. The discharge of PM_{10} (particulate matter less than or equal to 10 micr	one in diameter) to the at	mosphere shall	
	exceed 1.44 pounds per hour, nor more than 6.29 tons per 12-month rollin		inosphere shan i	
	c. The discharge of $PM_{2.5}$ (particulate matter less than or equal to 2.5 micr		tmosphere shall	
	exceed 1.44 pounds per hour, nor more than 6.29 tons per 12-month rolling		intosphere shan i	
	d. The discharge of SO ₂ (sulfur dioxide) to the atmosphere shall not exceed		or more than 0 (
	tons per 12-month rolling period.			
	e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not	exceed 1 36 nounds per h	our nor more th	
	5.97 tons per 12-month rolling period.	exceed 1.50 pounds per n	iour, nor more u	
	f. The discharge of CO (carbon monoxide) to the atmosphere shall not exce	ed 1 86 nounds per hour	nor more than 8	
	tons per 12-month rolling period.	iou pounds per nour,	nor more than o	
		e shall not exceed 0.12 pc	ounds per hour r	
	g. The discharge of VOCs (volatile organic compounds) to the atmosphere more than 0.53 tons per 12-month rolling period.	5 shull not exceed 0.12 pt	Junus per nour, i	
	 h. NAC 445B.22017 – The opacity from the exhaust stack of the Baghouse 	shall not equal or exceed	20 percent	
	 i. NAC 445B.2203 – The maximum allowable discharge of PM₁₀ to the atn 			
	e	assphere from bailord a		
	pounds per MMBtu.			
	 pounds per MMBtu. NAC 445B 22047 – The maximum allowable discharge of sulfur to the 	e atmosphere from S2 167		
	j. NAC 445B.22047 – The maximum allowable discharge of sulfur to the	e atmosphere from S2.167		
	· ·	-	B shall not exce	



Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BT. Emission Units S2.165B through S2.167B (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. <u>Natural Gas</u>
 - (1) Monitor and record the consumption rate of **natural gas** for each calendar day for **S2.167B** (in **scf**) by use of a fuel flow meter.
 - (2) Record the average hourly consumption rate (in scf per hour) for **S2.167B** using the total daily consumption rate and total daily hours of operation.
 - (3) Record the consumption rate (in scf) on a cumulative monthly basis, for each 12-month rolling period.
- b. <u>Clinker, pozzolan, limestone, lime, gypsum, cement kiln dust, and fly ash</u>
 - (1) Monitor and record the throughput for **S2.165B and S2.166B**, each, for each calendar day.
 - (2) Record the average hourly throughput rate (in tons per hour) for **S2.165B and S2.166B, each**, using the total daily throughput rate and total daily hours of operation.
 - (3) Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the hours of operation for **S2.165B through S2.167B, each**, for each calendar day
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.165B through S2.167B** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.165B through S2.167B** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A and Method 202 in Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} and $PM_{2.5}$ emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A and 202 test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 and Method 202 in Appendix M of 40 CFR Part 51 test. All particulate captured in the Method 5 and Method 202 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 6C in Appendix A of 40 CFR Part 60 shall be used to determine the sulfur dioxide concentration. Each test will be run for a minimum of one hour.



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BT. Emission Units S2.165B through S2.167B (continued)

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following: (continued)

- g. Method 7E in Appendix A of 40 CFR Part 60 shall be used to determine the nitrogen oxides concentration. Each test will be run for a minimum of one hour.
- h. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.
- i. Method 10 in Appendix A of 40 CFR Part 60 shall be used to determine the carbon monoxide concentration. Each test will be run for a minimum of one hour.
- j. Method 25A in Appendix A of 40 CFR Part 60 shall be used to determine the volatile organic compound concentration. Method 18 in Appendix A of 40 CFR Part 60 or Method 320 in Appendix A of CFR Part 63 may be used in conjunction with Method 25A to break out the organic compounds that are not considered VOC's by definition per 40 CFR 51.100(s). Each Method 25A test will be run for a minimum of one hour.
- 6. <u>Federal Requirements</u>
 - a. <u>Prevent of Significant Deterioration of Air Quality (PSD) 40 CFR Part 52.21</u> The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.
 - <u>Compliance Assurance Monitoring (CAM) (40 CFR 64.1, et.seq.)</u> The Permittee, upon issuance of this operating permit, shall conduct monitoring, recordkeeping, and reporting for the controls on S2.165B through S2.167B, as listed in Table BT -1 below:

Table BT -1:					
Part 64 CAM Monitoring for the controls on S2.165B through S2.167B					
CAM Performance Indicator===>	CAM Performance Indicator===> Pressure Drop				
Measurement Approach	Conduct and record a reading of the baghouse pressure drop daily. If the baghouse is not in operation, the record shall indicate it was not in operation.				
Indicator Range	An excursion is defined as a pressure drop less than 2.0 inches of water or greater than 13.0 inches of water. Excursions trigger an inspection and corrective actions.				
Measurement Locations	The pressure taps are located at the inlet and outlet of the baghouse.				
Verification of Operational Status Annually.					
Quality Assurance/Quality ControlThe gauge is a Magnehilic. The pressure taps are purged anytime there are continuous readings below 2.0 inches of water.					
Monitoring Frequency	An instantaneous reading of the baghouse pressure drop is conducted and recorded daily. If the baghouse is not in operation, the record shall indicate it was not in operation.				
Data Collection Procedures	An instantaneous reading of the baghouse pressure drop is recorded daily.				
Averaging Periods	Instantaneous reading.				
Operation of Approved Monitoring	Permittee shall comply with the applicable provisions of 40 CFR 64.7.				
Reporting	Permittee shall comply with the applicable <i>General Reporting Requirements</i> set forth in 40 CFR 64.9(a).				
Recordkeeping	Permittee shall comply with the applicable <i>General Recordkeeping Requirements</i> set forth in 40 CFR 64.9(b).				



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BU. Emission Unit S2.168

System 35 – PAC Storage Silo		Location UTM (Zone 11, NAD 83	
PAC Storage Silo Loading [PAC Storage Silo Unloading to Ductwork is 100%		m North	m East
S2.168	Fully Enclosed]	4,387,929	305,819
1.	 <u>Air Pollution Control Equipment</u> (NAC 445B.3405) a. Emissions from S2.168 shall be controlled by a Baghouse. b. <u>Descriptive Stack Parameters</u> Stack Height: 51.7 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient Exhaust Flow: 1,500.0 dry standard cubic feet per minute (dscfm) 		
2.	 <u>Operating Parameters</u> (NAC 445B.3405) a. The maximum allowable throughput rate for S2.168 shall not exceed 5.0 tor calendar day, nor more than 18,000.0 tons per 12-month rolling period. b. <u>Hours</u> (1) S2.168 may operate a total of 24 hours per day. (2) S2.168 may operate a total of 4,000 hours per 12-month rolling period. 	ns of carbon per hou	ır, averaged over a
3.	 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not discharge or cause the exhaust stack of the Baghouse the following pollutants in excess of the following sp a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0. tons per 12-month rolling period. b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns if exceed 0.064 pounds per hour, nor more than 0.13 tons per 12-month rolling period. c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns exceed 0.064 pounds per hour, nor more than 0.13 tons per 12-month rolling period. d. NAC 445B.22017 – The opacity from the exhaust stack of the Baghouse shall e. NAC 445B.22033 – The maximum allowable discharge of PM₁₀ to the atmospounds per hour. 	ecified limits: 064 pounds per hour, in diameter) to the atto period. in diameter) to the atto period. I not equal or exceed	nor more than 0.13 mosphere shall not mosphere shall not 20 percent.
4.	 <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall maintain, in a correcordkeeping specified in this section. All records in the log must be identified wispecified records shall be entered into the log at the end of the shift, end of the day or operation for the month, as appropriate. a. Monitor and record the throughput for S2.168 for each calendar day. b. Monitor and record the hours of operation for S2.168 for each calendar day. c. Record the corresponding average hourly throughput rate in tons per hour. The determined from the total daily throughput and the total daily hours of operation. d. Record the throughput rate of material, in tons, on a cumulative monthly basis e. Record the monthly hours of operation and the corresponding annual hours period. The monthly hours of operation shall be determined at the end of each operation for each day of the month. The annual hours of operation shall be determined at the end of each operation for each day of the month. 	vith the calendar date f operation, or the end e average hourly throu on. a, for each 12-month r of operation for each ach month as the sun	e of the record. All l of the final day of ughput rate shall be rolling period. h 12-month rolling n of daily hours of



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BU. Emission Unit S2.168 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- f. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.168** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- g. Inspect the baghouse installed on **S2.168** on a **weekly** basis in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric), and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BV. Emission Unit S2.169

System 36 – Waste PAC Storage Silo		Zone 11, NAD 83)
Waste PAC Storage Silo [Waste Storage Silo Unloading into Du	m North	m East
S2.169 [Waste FAC Storage Sho [Waste Storage Sho Officialing into De Fully Enclosed]	4,387,920	305,836
 Air Pollution Control Equipment (NAC 445B.3405) Emissions from S2.169 shall be controlled by a Baghouse. Descriptive Stack Parameters Stack Height: 53.3 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient 		
 Exhaust Flow: 600.0 dry standard cubic feet per minute (ds 2. <u>Operating Parameters</u> (NAC 445B.3405) 		
 a. The maximum allowable throughput rate for S2.169 shall calendar day, nor more than 18,000.0 tons per 12-month ro b. <u>Hours</u> S2.169 may operate a total of 24 hours per day. S2.169 may operate a total of 4,000 hours per 12-month 	lling period.	ur, averaged over a
 <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405) The Permittee, upon issuance of this operating permit, shall not disexhaust stack of the Baghouse the following pollutants in excess of a. The discharge of PM (particulate matter) to the atmosphener 0.051 tons per 12-month rolling period. The discharge of PM₁₀ (particulate matter less than or equexceed 0.026 pounds per hour, nor more than 0.051 tons per c. The discharge of PM_{2.5} (particulate matter less than or equexceed 0.026 pounds per hour, nor more than 0.051 tons per d. NAC 445B.22017 – The opacity from the exhaust stack of e. NAC 445B.22033 – The maximum allowable discharge of pounds per hour. 	of the following specified limits: ere shall not exceed 0.026 pounds per he ual to 10 microns in diameter) to the at er 12-month rolling period. ual to 2.5 microns in diameter) to the at er 12-month rolling period. the Baghouse shall not equal or exceed	nour, nor more that tmosphere shall no tmosphere shall no 20 percent.
 Monitoring, Recordkeeping, and Reporting (NAC 445B.3405) The Permittee, upon the issuance of this operating permit, shall recordkeeping specified in this section. All records in the log m specified records shall be entered into the log at the end of the shir operation for the month, as appropriate. Monitor and record the throughput for S2.169 for each cale Monitor and record the hours of operation for S2.169 for each cale Monitor and record the hours of operation for S2.169 for each cale Record the corresponding average hourly throughput rate in determined from the total daily throughput and the total dail Record the throughput rate of material, in tons, on a cumula Record the monthly hours of operation shall be determined operation for each day of the month. The annual hours of op sum of the monthly hours of operation for each 12-month r 	nust be identified with the calendar data ft, end of the day of operation, or the en- endar day. ach calendar day. n tons per hour. The average hourly thro ily hours of operation. ative monthly basis, for each 12-month and annual hours of operation for eac ned at the end of each month as the sur peration shall be determined at the end of	e of the record. Al d of the final day of ughput rate shall be rolling period. th 12-month rolling n of daily hours of



Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BV. Emission Unit S2.169 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405) (continued)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate. (continued)

- f. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.169** on a **weekly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the weekly visible emissions, and any corrective actions taken.
- g. Inspect the baghouse installed on **S2.169** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BW. Emission Units S2.170 through S2.179

System 27	Counct Shuedding Oneurotion	Location UTM (Zone 11, NAD 83)	
System 57 -	System 37 – Carpet Shredding Operation		m East
S2.170	Primary Shredder and associated transfers (In from Conveyor Belt BC-001, Out to Reversing Belt BC-002)		305,886
S2.171	Reversing Belt BC-002 to Conveyor Belt BC-004		
S2.172	Reversing Belt BC-004 to Drag Chain DG-001		
S2.173	Drag Chain DG-001 to Walking Floor Trailer #1		
S2.174	Drag Chain DG-001 to Walking Floor Trailer #2		
S2.175	Reversing Belt BC-002 to Conveyor Belt BC-003	4,388,195	
S2.176	Secondary Shredder/Crusher/Mill and associated transfers (In from Conveyor Belt BC-003, Out to Shaker Screen)		
S2.177	Shaker Screen and associated transfers (In from Secondary Shredder/Crusher/Mill, Out to Conveyor Belt BC-005 or Conveyor Belt BC-004)		
S2.178	Conveyor Belt BC-005 to Bag Loader		
S2.179	Bag Loading		

1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)

a. Emissions from **S2.170 through S2.179** shall be controlled by a **Baghouse**.

 <u>Descriptive Stack Parameters</u> Stack Height: 40.0 feet Stack Diameter: 1.00 feet Stack Temperature: Ambient Exhaust Flow: 3,000.0 dry standard cubic feet per minute (dscfm)

2. <u>Operating Parameters</u> (NAC 445B.3405)

- a. The maximum allowable throughput rate for **S2.170 through S2.179**, each, shall not exceed **120.0** tons of carpet per hour, averaged over a calendar day.
- b. <u>Hours</u>
 - (1) S2.170 through S2.179, each, may operate a total of 24 hours per day.

3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3405)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **Baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.051** pounds per hour, nor more than **0.23** tons per 12-month rolling period.
- b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.051 pounds per hour, nor more than 0.23 tons per 12-month rolling period.
- c. The discharge of **PM_{2.5}** (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed **0.051** pounds per hour, nor more than **0.23** tons per 12-month rolling period.
- d. NAC 445B.22017 The opacity from the **Baghouse** shall not equal or exceed **20** percent.
- e. NAC 445B.22033 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **S2.170 through S2.179, each**, shall not exceed **21.7** pounds per hour.



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section IV. Specific Operating Conditions (continued)

BW. Emission Units S2.170 through S2.179 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.3405)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.170 through S2.179**, each, for each calendar day.
- b. Monitor and record the hours of operation for **S2.170 through S2.179, each**, for each calendar day.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Record the throughput rate of material (in tons) on a cumulative monthly basis, for each 12-month rolling period.
- e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling **S2.170 through S2.179** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the monthly visible emissions, and any corrective actions taken.
- f. Inspect the baghouse installed on **S2.170 through S2.179** in accordance with the Dust Collector Routine Maintenance Plan dated January 5, 2009 and record the results and any corrective actions taken.

5. <u>Performance and Compliance Testing</u> (NAC 445B.3405, (NAC 445B.252(1))

The Permittee, upon issuance of this operating permit, shall conduct and record renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section **I.I.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered $PM_{2.5}$ for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.

6. <u>Federal Requirements</u>

Prevent of Significant Deterioration of Air Quality (PSD) - 40 CFR Part 52.21

The Permittee, upon issuance of this operating permit, shall comply with the PSD Source Obligation requirements set forth in **Section IX** of this operating permit.

****End of Specific Operating Conditions****

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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section V. NESHAP Subpart LLL – Portland Cement Manufacturing Industry

Emission Standards (40 CFR 63.1343, Table 1) A.

- 1. General. The provisions in 40 CFR 63.1343 apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, raw material dryer, and open clinker storage pile. All D/F, HCl, and total hydrocarbon (THC) emissions limit are on a dry basis. The D/F, HCl, and THC limits for kilns are corrected to 7 percent oxygen. All THC emissions limits are measured as propane. Standards for mercury and THC are based on a rolling 30-day average. If using a CEMS to determine compliance with the HCl standard, this standard is based on a rolling 30-day average. The Permittee must ensure appropriate corrections for moisture are made when measuring flow rates used to calculate mercury emissions. The 30-day period means all operating hours within 30 consecutive kiln operating days excluding periods of startup and shutdown. All emissions limits for kilns, clinker coolers, and raw material dryers currently in effect that are superseded by the limits below continue to apply until the compliance date of the limits below, or until the source certifies compliance with the limits below, whichever is earlier. (40 CFR 63.1343(a))
- 2. The Permittee must comply with the following emission limits for the existing raw material dryer in Systems 06, 06A, and **06B**, each, during normal operation located at an area source of HAPS. (40 CFR 63.1343(b), Table 1) a.
 - The discharge of **THC** to the atmosphere shall not exceed **24** ppmvd, based on a 30-day rolling average.
- The Permittee must comply with the following emission limits for the existing kiln in Systems 09 and 09A, each, during 3. normal operation located at an area source of HAPS. (40 CFR 63.1343(b), Table 1)
 - The discharge of Filterable PM (particulate matter) to the atmosphere shall not exceed 0.07 lb/ton of clinker. a.
 - The discharge of **D/F** (dioxins and furans) to the atmosphere shall not exceed **0.2** ng/dscm with a 7 percent oxygen b. correction factor with the average baghouse inlet temperature of greater than 400°F or 0.40 ng/dscm with a 7 percent oxygen correction factor with the average baghouse inlet temperature of 400°F or less.
 - The discharge of Hg (mercury) to the atmosphere shall not exceed 55 lb/MM tons of clinker, based on a 30-day rolling c. average.
 - The discharge of **THC** (total hydrocarbon) to the atmosphere shall not exceed 24 ppmvd with a 7 percent oxygen d. correction factor, based on a 30-day rolling average.
- 4. The Permittee must comply with the following emission limits for an existing clinker cooler in Systems 10 and 16, each, during normal operation located at an area source of HAPS. (40 CFR 63.1343(b), Table 1)
 - The discharge of **Filterable PM** to the atmosphere shall not exceed **0.07** lb/ton of clinker.
- The Permittee must comply with the following emission limits for the existing kiln in Systems 15 and 15A, each, during 5. normal operation located at an area source of HAPS. (40 CFR 63.1343(b), Table 1)
 - The discharge of **Filterable PM** to the atmosphere shall not exceed **0.07** lb/ton of clinker. a.
 - b. The discharge of **D/F** to the atmosphere shall not exceed **0.2** ng/dscm with a **7** percent oxygen correction factor with the average baghouse inlet temperature of greater than 400°F or **0.40** ng/dscm with a 7 percent oxygen correction factor with the average baghouse inlet temperature of 400°F or less.
 - The discharge of **Hg** to the atmosphere shall not exceed **55** lb/MM tons of clinker, based on a 30-day rolling average. c.
 - d. The discharge of **THC** to the atmosphere shall not exceed 24 ppmvd with a 7 percent oxygen correction factor, based on a 30-day rolling average.

Operating Limits for Kilns (40 CFR 63.1346) Β.

a.

- The Permittee of a kiln subject to a D/F emissions limitation under 40 CFR 63.1343 must operate the kiln such that the 1. temperature of the gas at the inlet to the kiln PM control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of 40 CFR 63.1346. (40 CFR 63.1346 (a))
- The temperature limit for affected sources meeting the limits of 40 CFR 63.1346(a) or paragraphs (a)(1) through (a)(3) of 40 2. CFR 63.1346 is determined in accordance with 40 CFR 63.1349(b)(3)(iv). (40 CFR 63.1346 (b))
- 3. No kiln may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent, unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (i.e., emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline. Once the kiln is in compliance with a mercury emissions limit specified in 40 CFR 63.1343, this paragraph no longer applies. (40 CFR 63.1346(f))



4.

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- B. Operating Limits for Kilns (40 CFR 63.1346) (continued)
 - During periods of startup and shutdown the Permittee must meet the following requirements (40 CFR 63.1346(g)(1) through (4)):
 - a. During startup the Permittee must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit.
 - b. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.
 - c. The Permittee must keep records as specified in 40 CFR 63.1355 during periods of startup and shutdown.
- C. Operation and Maintenance Plan (40 CFR 63.1347)
 - The Permittee must prepare a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a Part 70 permit and must include the following information (40 CFR 63.1347(a)(1) through (3)):
 - a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles of 40 CFR 63.1343, 63.1345, and 63.1346. The operations and maintenance plan must address periods of startup and shutdown.
 - b. Corrective actions to be taken when required by 40 CFR 63.1350(f)(3);
 - c. Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.
 - 2. Failure to comply with any provision of the operations and maintenance plan developed in accordance with 40 CFR 63.1347 is a violation of the standard. (40 CFR 63.1347(b))
- D. <u>Compliance Requirements</u> (40 CFR 63.1348)
 - 1. *Continuous Monitoring Requirements*. The Permittee must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in 40 CFR 63.1350 and 63.8 for each affected source. (40 CFR 63.1348(b))
 - a. General Requirements. (40 CFR 63.1348(b)(1))
 - (1) The Permittee must monitor and collect data according to 40 CFR 63.1350 and the site-specific monitoring plan required by 40 CFR 63.1350(p). (40 CFR 63.1348(b)(1)(i))
 - (2) Except for periods of startup and shutdown, monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee must operate the monitoring system and collect data at all required intervals at all times the affected source is operating. (40 CFR 63.1348(b)(1)(ii))
 - (3) The Permittee may not use data recorded during monitoring system startup, shutdown or malfunctions or repairs associated with monitoring system malfunctions in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. (40 CFR 63.1348(b)(1)(iii))
 - (4) *Clinker Production.* The Permittee must determine the hourly production rate of clinker according to the requirements of 40 CFR 63.1350(d). (40 CFR 63.1348(b)(1)(iv))
 - b. *PM Compliance*. The Permittee must use the monitoring methods and procedures in 40 CFR 63.1350(b) and (d). (40 CFR 63.1348(b)(2))
 - c. *D/F Compliance*. The Permittee must demonstrate compliance using a continuous monitoring system (CMS) that is installed, operated and maintained to record the temperature of specified gas streams in accordance with the requirements of 40 CFR 63.1350(g). (40 CFR 63.1348(b)(4))



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- D. <u>Compliance Requirements</u> (40 CFR 63.1348) (continued)
 - 1. *Continuous Monitoring Requirements.* The Permittee must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in 40 CFR 63.1350 and 63.8 for each affected source. (40 CFR 63.1348(b)) (continued)
 - d. *THC Compliance*. The Permittee must demonstrate compliance using the monitoring methods and procedures in 40 CFR 63.1350(i) and (j). THC must be measured either upstream of the coal mill or in the coal mill stack. (40 CFR 63.1348(b)(6)(i) and (ii))
 - e. *Mercury Compliance*. The Permittee must demonstrate compliance using the monitoring methods and procedures in 40 CFR 63.1350(k). If the Permittee uses an integrated sorbent trap monitoring system to determine ongoing compliance, use the procedures described in 40 CFR 63.1348(a)(5) to assign hourly mercury concentration values and to calculate rolling 30 operating day emissions rates. Since the Permittee assigns the mercury concentration measured with the sorbent trap to each relevant hour respectively for each operating day of the integrated period, the Permittee may schedule the sorbent trap change periods to any time of the day (i.e., the sorbent trap replacement need not be scheduled at 12:00 midnight nor must the sorbent trap replacements occur only at integral 24-hour intervals). Mercury must be measured either upstream of the coal mill or in the coal mill stack. (40 CFR 63.1348(b)(7)(i) and (ii))
 - 2. *Changes in operations.* (40 CFR 63.1348(c))
 - a. If the Permittee plans to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in 40 CFR 63.1349(b). (40 CFR 63.1348(c)(1))
 - b. In preparation for and while conducting a performance test required in 40 CFR 63.1349(b), the Permittee may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in (c)(2)(i) through (c)(2)(iv) of 40 CFR 63.1348 are met. The Permittee must submit temperature and other monitoring data that are recorded during the pretest operations. (40 CFR 63.1348(c)(2))
 - (1) The Permittee must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (c)(1) of 40 CFR 63.1348, including when the planned operational change period would begin. (40 CFR 63.1348(c)(2)(i))
 - (2) The performance test results must be documented in a test report according to 40 CFR 63.1349(a). (40 CFR 63.1348(c)(2)(ii)
 - (3) A test plan must be made available to the Administrator prior to performance testing, if requested. (40 CFR 63.1348(c)(2)(iii)
 - (4) The performance test must be completed within 360 hours after the planned operational change period begins. (40 CFR 63.1348(c)(2)(iv)
 - 3. *General duty to minimize emissions.* At all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.1348(d))

E. <u>Performance Testing Requirements</u> (40 CFR 63.1349)

The Permittee must document performance test results in complete test reports that contain the information required by paragraphs (a)(1) through (10) of 40 CFR 63.1349, as well as all other relevant information. As described in 40 CFR 63.7(c)(2)(i), the Permittee must make available to the Administrator prior to testing, if requested, the site-specific test plan to be followed during performance testing. (40 CFR 63.1349(a))



5.

a.

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F. Monitoring Requirements (40 CFR 63.1350)

- 1. Following the compliance date, the Permittee must demonstrate compliance with Subpart LLL on a continuous basis by meeting the requirements of this section. (40 CFR 63.1350(a)(1))
- 2. For each existing unit that is equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests. (40 CFR 63.1350(a)(3))
- 3. Any instance where the Permittee fails to comply with the continuous monitoring requirements of this section is a violation. (40 CFR 63.1350(a)(4))
- 4. *PM monitoring requirements.* (40 CFR 63.1350(b))
 - a. The Permittee will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. The Permittee will conduct the performance test using Method 5 or Method 5I at Appendix A-3 to 40 CFR Part 60. The Permittee will use the PM CPMS to demonstrate continuous compliance with this operating limit. The Permittee must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test using the procedures in 40 CFR 63.1349(b)(1) (i) through (vi) of Subpart LLL. The Permittee must also repeat the test if you change the analytical range of the instrument, or if the Permittee replaces the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration. (40 CFR 63.1350(b)(1)(i))
 - b. To determine continuous compliance, the Permittee must use the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. The Permittee must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. (40 CFR 63.1350(b)(1)(ii))
 - c. For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, the Permittee must (40 CFR 63.1350(b)(1)(iii)(A) through (C)):
 - (1) Within 48 hours of the exceedance, visually inspect the APCD;
 - (2) If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and
 - (3) Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. The Permittee is not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph.
 - d. PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of Subpart LLL. (40 CFR 63.1350(b)(1)(iv))
 - *Clinker production monitoring requirements.* In order to determine clinker production, the Permittee must (40 CFR 63.1350(d)):
 - Determine hourly clinker production by one of two methods (40 CFR 63.1350(d)(1)):
 - (1) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy, or (40 CFR 63.1350(d)(1)(i))
 - (2) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate the hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but do not have to retroactively change clinker production rates previously estimated. (40 CFR 63.1350(d)(1)(ii))



5.

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- *Clinker production monitoring requirements.* In order to determine clinker production, the Permittee must (40 CFR 63.1350(d)): (continued)
 - b. Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable) before initial use (for new sources) or by the effective compliance date of this rule (for existing sources). During each quarter of source operation, the Permittee must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow). (40 CFR 63.1350(d)(2))
 - c. If the Permittee measures clinker production directly, record the daily clinker production rates; if the Permittee measures the kiln feed rates and calculate clinker production, record the hourly kiln feed and clinker production rates. (40 CFR 63.1350(d)(3))
 - d. Develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of 40 CFR 63.1350. (40 CFR 63.1350(d)(4))
- 6. *D/F monitoring requirements*. The Permittee must comply with the monitoring requirements of paragraphs (g)(1) through (5) and (m)(1) through (4) of 40 CFR 63.1350 to demonstrate continuous compliance with the D/F emissions standard. The Permittee must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of 40 CFR 63.1350. (40 CFR 63.1350(g))
 - a. The Permittee must install, calibrate, maintain, and continuously operate a CMS to record the temperature of the exhaust gases from the kiln and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln and/or alkali bypass PMCDs. (40 CFR 63.1350(g)(1))
 - (1) The temperature recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1349(b)(3)(iv). (40 CFR 63.1350(g)(1)(i))
 - (2) The calibration reference for the temperature measurement must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator. (40 CFR 63.1350(g)(1)(ii))
 - (3) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months. (40 CFR 63.1350(g)(1)(iii))
 - b. The Permittee must monitor and continuously record the temperature of the exhaust gases from the kiln and alkali bypass, if applicable, at the inlet to the kiln and/or alkali bypass PMCD. (40 CFR 63.1350(g)(2))
 - c. The required minimum data collection frequency must be one minute. (40 CFR 63.1350(g)(3))
 - d. Every hour, record the calculated rolling three-hour average temperature using the average of 180 successive oneminute average temperatures. See 40 CFR 63.1349(b)(3). (40 CFR 63.1350(g)(4))
 - e. When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on or from on to off, the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings. (40 CFR 63.1350(g)(5))
- 7. *THC Monitoring Requirements*. The Permittee must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of 40 CFR 63.1350. The Permittee must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of 40 CFR 63.1350. (40 CFR 63.1350(i))
 - a. The Permittee must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 or Performance Specification 8A of Appendix B to 40 CFR Part 60 and comply with all of the requirements for continuous monitoring systems found in the general provisions, Subpart A of Part 63. The Permittee must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of Appendix F in 40 CFR Part 60. For THC continuous emission monitoring systems certified under Performance Specification 8A, conduct the relative accuracy test audits required under Procedure 1 in accordance with Performance Specification 8, Sections 8 and 11 using Method 25A in Appendix A to 40 CFR Part 60 as the reference method; the relative accuracy must meet the criteria of Performance Specification 8, Section 13.2. (40 CFR 63.1350(i)(1))



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F. Monitoring Requirements (40 CFR 63.1350) (continued)

- 8. Total organic HAP monitoring requirements. If the Permittee is complying with the total organic HAP emissions limits, the Permittee must continuously monitor THC according to paragraphs (i)(1) and (2) of 40 CFR 63.1350 or in accordance with Performance Specification 8 or Performance Specification 8A of Appendix B to 40 CFR Part 60 and comply with all of the requirements for continuous monitoring systems found in the general provisions, Subpart A of Part 63. The Permittee must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of Appendix F in 40 CFR Part 60. The Permittee must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of 40 CFR 63.1350. (40 CFR 63.1350(j))
- 9. *Mercury monitoring requirements.* The Permittee must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A (PS 12A) of Appendix B to 40 CFR Part 60 or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of Appendix B to 40 CFR Part 60. The Permittee must monitor mercury continuously according to paragraphs (k)(1) through (5) of 40 CFR 63.1350. The Permittee must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of 40 CFR 63.1350. (40 CFR 63.1350(k))
 - a. The Permittee must use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to the nearest multiple of 5 μ g/m3 of total mercury or higher level if necessary to include Hg concentrations which may occur (excluding concentrations during in-line raw "mill off" operation). As specified in PS 12A, Section 6.1.1, the data recorder output range must include the full range of expected Hg concentrations used to determine the corresponding span concentration from the emission standard shall be documented in the site-specific monitoring plan and associated records. (40 CFR 63.1350(k)(1))
 - b. In order to quality assure data measured above the span value, the Permittee must use one of the four options in paragraphs (k)(2)(i) through (iv) of 40 CFR 63.1350. (40 CFR 63.1350(k)(2))
 - (1) Include a second span that encompasses the Hg emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of 5 μ g/m3 of total mercury. The requirements of PS 12A, shall be followed for this second span with the exception that a RATA with the mill off is not required. (40 CFR 63.1350(k)(2)(i))
 - (2)Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (k)(1) of 40 CFR 63.1350 using the following procedure. Conduct a weekly "above span linearity" calibration challenge of the monitoring system using a reference gas with a certified value greater than your highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The "above span" reference gas must meet the requirements of PS 12A, Section 7.1 and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The "above span linearity" challenge is successful if the value measured by the Hg CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the Hg CEMS during the above span linearity challenge exceeds ± 10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new "above span linearity" challenge met before returning the Hg CEMS to service, or data above span from the Hg CEMS must be subject to the quality assurance procedures established in paragraph (k)(2)(iii) of 40 CFR 63.1350. In this manner all hourly average values exceeding the span value measured by the Hg CEMS during the week following the above span linearity challenge when the CEMS response exceeds ±20 percent of the certified value of the reference gas must be normalized using Equation 22. (40 CFR 63.1350(k)(2)(ii))

(Eq. 22)



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- 9. *Mercury monitoring requirements.* The Permittee must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A (PS 12A) of Appendix B to 40 CFR Part 60 or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of Appendix B to 40 CFR Part 60. The Permittee must monitor mercury continuously according to paragraphs (k)(1) through (5) of 40 CFR 63.1350. The Permittee must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of 40 CFR 63.1350. (40 CFR 63.1350(k)) (continued)
 - b. In order to quality assure data measured above the span value, the Permittee must use one of the four options in paragraphs (k)(2)(i) through (iv) of 40 CFR 63.1350. (40 CFR 63.1350(k)(2)) (continued)
 - Ouality assure any data above the span value established in paragraph (k)(1) of 40 CFR 63.1350 using the (3)following procedure. Any time two consecutive 1-hour average measured concentrations of Hg exceeds the span value the Permittee must, within 24 hours before or after, introduce a higher, "above span" Hg reference gas standard to the Hg CEMS. The "above span" reference gas must meet the requirements of Performance Specification 12A, Section 7.1, must target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include "above span" calibrations done before or after the above span measurement period. Record and report the results of this procedure as for a daily calibration. The "above span" calibration is successful if the value measured by the Hg CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the Hg CEMS exceeds 20 percent of the certified value of the reference gas, then the Permittee must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the "above span" calibration for reporting based on the Hg CEMS response to the reference gas as shown in Equation 22. Only one "above span" calibration is needed per 24-hour period. (40 CFR 63.1350(k)(2)(iii))
 - c. The Permittee must operate and maintain each Hg CEMS or an integrated sorbent trap monitoring system according to the quality assurance requirements in Procedure 5 of Appendix F to 40 CFR Part 60. During the RATA of integrated sorbent trap monitoring systems required under Procedure 5, the Permittee may apply the appropriate exception for sorbent trap section 2 breakthrough in (k)(3)(i) through (iv) of 40 CFR 63.1350 (40 CFR 63.1350(k)(3)(i) through (iv)):
 - (1) For stack Hg concentrations >1 μ g/dscm, \leq 10% of section 1 mass;
 - (2) For stack Hg concentrations $\leq 1 \mu g/dscm$ and $>0.5 \mu g/dscm$, $\leq 20\%$ of section 1 mass;
 - (3) For stack Hg concentrations $\leq 0.5 \,\mu$ g/dscm and $> 0.1 \,\mu$ g/dscm, $\leq 50\%$ of section 1 mass; and
 - (4) For stack Hg concentrations $\leq 0.1 \,\mu$ g/dscm, no breakthrough criterion assuming all other QA/QC specifications are met.
 - d. Relative accuracy testing of mercury monitoring systems under Performance Specifications 12A, PS 12B, or Procedure 5 must be conducted at normal operating conditions. If a facility has an inline raw mill, the testing must occur with the raw mill on. (40 CFR 63.1350(k)(4))
- 10. *Parameter monitoring requirements*. If the Permittee has an operating limit that requires the use of a CMS, the Permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (m)(1) through (4) of 40 CFR 63.1350 by the compliance date specified in 40 CFR 63.1351. The Permittee must also meet the applicable specific parameter monitoring requirements in 40 CFR 63.1350(m)(5) through (11) that are applicable. (40 CFR 63.1350(m))



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Section V. <u>NESHAP Subpart LLL – Portland Cement Manufacturing Industry</u> (continued)

- 11. *Continuous Flow Rate Monitoring System.* The Permittee must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) through (10) of 40 CFR 63.1350, for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit and that is required to be monitored by a CEMS. (40 CFR 63.1350(n))
 - a. The Permittee must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate. (40 CFR 63.1350(n)(1))
 - b. The flow rate monitoring system must be designed to measure the exhaust flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust flow rate. (40 CFR 63.1350(n)(2))
 - c. The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph (n)(2) of 40 CFR 63.1350. (40 CFR 63.1350(n)(4))
 - d. The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system. (40 CFR 63.1350(n)(5))
 - e. The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period. (40 CFR 63.1350(n)(6))
 - f. The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in Appendix B to 40 CFR Part 60 for a discussion of CD). (40 CFR 63.1350(n)(7))
 - (1) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span). (40 CFR 63.1350(n)(7)(i))
 - (2) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span. (40 CFR 63.1350(n)(7)(ii))
 - g. The Permittee must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of Appendix B to Part 60 of the chapter with the exceptions in paragraphs (n)(8)(i) and (n)(8)(ii) of 40 CFR 63.1350. (40 CFR 63.1350(n)(8))
 - (1) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system. (40 CFR 63.1350(n)(8)(i))
 - (2) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data. (40 CFR 63.1350(n)(8)(ii))
 - h. The Permittee must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in 40 CFR 63.1350(n)(8). (40 CFR 63.1350(n)(9))
 - i The Permittee must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). (40 CFR 63.1350(n)(10))



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- 12. Alternate monitoring requirements approval. The Permittee may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart subject to the provisions of paragraphs (o)(1) through (6) of 40 CFR 63.1350. (40 CFR 63.1350(o))
 - a. The Administrator will not approve averaging periods other than those specified in this section, unless the Permittee documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test. (40 CFR 63.1350(o)(1))
 - b. If the application to use an alternate monitoring requirement is approved, the Permittee must continue to use the original monitoring requirement until approval is received to use another monitoring requirement. (40 CFR 63.1350(o)(2))
 - c. The Permittee must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (o)(3)(i) through (iii) of 40 CFR 63.1350 (40 CFR 63.1350(o)(3)(i) through (iii)):
 - (1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
 - (2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and
 - (3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
 - d. The Administrator will notify the Permittee of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide (40 CFR 63.1350(o)(4)(i) and (ii)):
 - (1) Notice of the information and findings upon which the intended disapproval is based; and
 - (2) Notice of opportunity for the Permittee to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the Permittee to provide additional supporting information.
 - e. The Permittee is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the Permittee of the responsibility to comply with any provision of Subpart LLL. (40 CFR 63.1350(o)(5))
 - f. The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of Subpart LLL. (40 CFR 63.1350(o)(6))



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F. Monitoring Requirements (40 CFR 63.1350) (continued)

- 13. Development and submittal (upon request) of monitoring plans. If the Permittee demonstrates compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the Permittee must develop a site-specific monitoring plan according to the requirements in paragraphs (p)(1) through (4) of 40 CFR 63.1350. This requirement also applies to the Permittee if the Permittee petitions the EPA Administrator for alternative monitoring parameters under paragraph (o) of 40 CFR 63.1350 and 40 CFR 63.8(f). (40 CFR 63.1350(p))
 - a. For each CMS required in this section, the Permittee must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (p)(1)(i) through (iii) of 40 CFR 63.1350. The Permittee must submit this site-specific monitoring plan, if requested, at least 30 days before the initial performance evaluation of the CMS. (40 CFR 63.1350(p)(1)(I) through (iii))
 - (1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
 - (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
 - (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
 - b. In the site-specific monitoring plan, the Permittee must also address paragraphs (p)(2)(i) through (iii) of 40 CFR 63.1350. (40 CFR 63.1350(p)(2)(i) through (iii))
 - (1) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);
 - (2) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and
 - (3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i).
 - c. The Permittee must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan. (40 CFR 63.1350(p)(3))
 - d. The Permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. (40 CFR 63.1350(p)(4))

G. Additional Test Methods (40 CFR 63.1352)

The Permittee conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, and kilns at Portland cement manufacturing facilities, solely for use in applicability determinations under 40 CFR 63.1340 of Subpart LLL are permitted to use Method 320 of Appendix A to Part 63, or Method 18 of Appendix A to 40 CFR Part 60. (40 CFR 63.1352(b))

H. <u>Notification Requirements</u> (40 CFR 63.1353)

- 1. The notification provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to the Permittee of affected sources subject to Subpart LLL are listed in Table 1 of Subpart LLL. If any State requires a notice that contains all of the information required in a notification listed in this section, the Permittee may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification. (40 CFR 63.1353(a))
- 2. The Permittee shall comply with the notification requirements in 40 CFR 63.9 as follows (40 CFR 63.1353(b)):
 - a. Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification. (40 CFR 63.1353(b)(1))
 - b. Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e). (40 CFR 63.1353(b)(2))
 - c. Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin. (40 CFR 63.1353(b)(4))
 - d. Notification of compliance status, as required by 40 CFR 63.9(h). (40 CFR 63.1353(b)(5))



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- H. Notification Requirements (40 CFR 63.1353) (continued)
 - 2. The Permittee shall comply with the notification requirements in 40 CFR 63.9 as follows (40 CFR 63.1353(b)): (continued)
 - e. Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of 40 CFR 63.7(b) and 63.9(e) do not apply to retesting required for exceedances under Subpart LLL. (40 CFR 63.1353(b)(6))
- I. <u>Reporting Requirements (40 CFR 63.1354)</u>
 - 1. The reporting provisions of Subpart A of Part 63 that apply and those that do not apply to the Permittee of affected sources subject to Subpart LLL are listed in Table 1 of Subpart LLL. If any State requires a report that contains all of the information required in a report listed in this section, the Permittee may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report. (40 CFR 63.1354(a))
 - 2. The Permittee shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of this Part 63, Subpart A as follows (40 CFR 63.1354(b)):
 - a. As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status. (40 CFR 63.1354(b)(1))
 - b. As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349. (40 CFR 63.1354(b)(2))
 - c. As required by 40 CFR 63.10(d)(4), the Permittee required to submit progress reports as a condition of receiving an extension of compliance under 40 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance. (40 CFR 63.1354(b)(3))
 - d. As required by 40 CFR 63.10(e)(2), the Permittee shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 CFR 63.8(e). The Permittee shall submit the report simultaneously with the results of the performance test. (40 CFR 63.1354(b)(6))
 - e. As required by 40 CFR 63.10(e)(3), the Permittee equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit. (40 CFR 63.1354(b)(8))



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- I. <u>Reporting Requirements (40 CFR 63.1354) (continued)</u>
 - 2. The Permittee shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of this Part 63, Subpart A as follows (40 CFR 63.1354(b)): (continued)
 - The Permittee shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The Permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for Subpart LLL, the Permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri), once the XML schema is available. If the reporting form specific to Subpart LLL is not available in CEDRI at the time that the report is due, the Permittee must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. The Permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted. The report must contain the information specified in 40 CFR 63.130(e)(3)(vi). In addition, the summary report shall include (40 CFR 63.1354(b)(9)(i) through
 - (vii)):
 - (1) All exceedances of maximum control device inlet gas temperature limits specified in 40 CFR 63.1346(a) and (b);
 - (2) Notification of any failure to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(g)(1)(iii) of Subpart LLL; and
 - (3) Notification of any failure to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under 40 CFR 63.1346(c)(2).
 - (4) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1347(a)(3).
 - (5) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a).
 - (6) For each PM CPMS, HCl, Hg, and THC CEMS, SO₂ CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems.
 - (7) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.
 - g. If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and continuous monitoring system performance report along with the summary report. (40 CFR 63.1354(b)(10))
 - h. All reports required by Subpart LLL not subject to the requirements in paragraphs (b)(9) introductory text and (b)(11)(i) of 40 CFR 63.1354 must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to 40 CFR 63.1354 (b)(9) introductory text and 40 CFR 63.1354 (b)(11)(i) in paper format. (40 CFR 63.1354(b)(12))
 - 3. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, the Permittee must report the failure in the semi-annual compliance report required by 40 CFR 63.1354(b)(9). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1348(d), including actions taken to correct a malfunction. (40 CFR 63.1354(c))



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J. <u>Recordkeeping Requirements</u> (40 CFR 63.1355)

- 1. The Permittee shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche. (40 CFR 63.1355(a))
- 2. The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and (40 CFR 63.1355(b))
 - a. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9 (40 CFR 63.1355(b)(1));
 - b. All records of applicability determination, including supporting analyses; and (40 CFR 63.1355(b)(2))
 - c. If the Permittee has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. (40 CFR 63.1355(b)(3))
- 3. In addition to the recordkeeping requirements in paragraph (b) of 40 CFR 63.1355, the Permittee of an affected source equipped with a continuous monitoring system shall maintain all records required by 40 CFR 63.10(c). (40 CFR 63.1355(c))
- 4. The Permittee must keep records of the daily clinker production rates according to the clinker production monitoring requirements in 40 CFR 63.1350(d). (40 CFR 63.1355(e))
- 5. The Permittee must keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period. (40 CFR 63.1355(f))
- 6. The Permittee must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions. (40 CFR 63.1355(g)(1))
- 7. The Permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.1355(g)(2))
- 8. For each exceedance from an emissions standard or established operating parameter limit, the Permittee must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions. (40 CFR 63.1355(h))

K. Sources with Multiple Emission Limit or Monitoring Requirements (40 CFR 63.1356)

If the Permittee has an affected source subject to Subpart LLL with a different emissions limit or requirement for the same pollutant under another regulation in 40 CFR, once the Permittee is in compliance with the most stringent emissions limit or requirement, the Permittee is not subject to the less stringent requirement. Until the Permittee is in compliance with the more stringent limit, the less stringent limit continues to apply.



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Section VI. <u>Federal Plan Requirements – 40 CFR Part 62 Subpart IIIa – Commercial and</u> <u>Industrial Solid Waste Incineration Units That Commenced Construction on or</u> <u>Before June 4, 2010 and Have Not Been Modified or Reconstructed Since August</u> <u>7, 2013</u>

A. Introduction

What is the purpose of this subpart?

Subpart IIIa establishes emission requirements and compliance schedules for the control of emissions from commercial and industrial solid waste incineration units (CISWI) that are not covered, or are only partially covered, by an EPA approved and currently effective state or tribal plan. The pollutants addressed by these emission requirements are listed in tables 4 through 7 to Subpart IIIa. These emission requirements are developed in accordance with Sections 111 and 129 of the Clean Air Act and 40 CFR Part 60, Subpart B. (40 CFR 62.14500a)

B. <u>Applicability</u>

Is the Permittee subject to this subpart?

- 1. The Permittee is subject to Subpart IIIa if the Permittee owns or operates a CISWI as defined in 40 CFR 62.14840a and the CISWI meets the criteria described in 40 CFR 62.14510a(a)(1) through (a)(3).
 - a. Construction of the CISWI unit commenced on or before June 4, 2010, and have not been modified or reconstructed since August 7, 2013. (40 CFR 62.14510a(a)(1))
 - b. The CISWI unit is not exempt under 40 CFR 62.14530a. (40 CFR 62.14510a(a)(2))
 - c. The CISWI unit CISWI is not regulated by an EPA approved and currently effective state or tribal plan, or the CISWI is located in any state whose approved state or tribal plan is only approved in part. In the case of a state or tribal program that is approved in part, the federal plan applies to affected CISWI in lieu of the disapproved portions of the state or tribal program until the state or tribe plan addresses the deficiencies and the revised plan is approved by the EPA. (40 CFR 62.14510a(a)(3))

C. <u>Compliance Schedule</u>

When must the facility comply with this subpart if the facility plans to continue operation of the CISWI?

- 1. The facility must complete the compliance schedule requirements of 40 CFR 62.14535a(a)(1) through (5). (40 CFR 62.14535a(a))
 - a. The Permittee must comply with the operating training and qualification requirements and inspection requirements 30 days after the date of publication in the Federal Register. (40 CFR 62.14535a(a)(1))
 - b. The Permittee must submit a waste management plan no later than 30 days after the date of publication in the Federal Register. (40 CFR 62.14535a(a)(2))
 - c. The Permittee must achieve final compliance by 30 days after the date of publication in the Federal Register. To achieve final compliance, the Permittee must incorporate all process changes and complete retrofit construction of control devices, so that, if the affected CISWI is brought online, all necessary process changes and air pollution control devices would operate as designed. (40 CFR 62.14535a(a)(3))
 - d. The Permittee must conduct the initial performance test within 180 days after the date required to achieve final compliance under40 CFR 62.14535a(a)(3). (40 CFR 62.14535a(a)(4))
 - e. The Permittee must submit an initial report including the results of the initial performance test no later than 60 days following the initial performance test (see 40CFR 62.14675a through 62.14735a for complete reporting and recordkeeping requirements). (40 CFR 62.14535a(a)(5))



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D. <u>Waste Management Plan</u>

1. What is a waste management plan?

A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste. (40 CFR 62.14550a)

- When must the facility submit a waste management plan? The facility must submit a waste management plan no later than 30 days after date of publication in the Federal Register or six months prior to commencing or recommencing burning solid waste, whichever is later. (40 CFR 62.14555a)
- 3. What should be included in the waste management plan?

A waste management plan must include consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; or the use of recyclable materials. The plan must identify any additional waste management measures, and the source must implement those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and any other environmental or energy impacts they might have. (40 CFR 62.14560a)

E. Operator Training and Qualification

- 1. What are the operator training and qualification requirements?
 - a. The Permittee must have a fully trained and qualified CISWI operator accessible at all times when the unit is in operation, either at the facility or able to be at the facility within one hour. The trained and qualified CISWI operator may operate the CISWI directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI operators are temporarily not accessible, the Permittee must follow the procedures in 40 CFR 62.14595a. (40 CFR 62.14565a(a))
 - b. Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in paragraph (c) of 40 CFR 62.14565a. (40 CFR 62.14565a(b))
 - c. Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of 40 CFR 62.14565a. (40 CFR 62.14565a(c))
 - (1) Training on the eleven subjects listed in paragraphs (c)(1)(i) through (xi) of 40 CFR 62.14565a. (40 CFR 62.14565a(c)(1)(i) through (xi))
 - (a) Environmental concerns, including types of emissions.
 - (b) Basic combustion principles, including products of combustion.
 - (c) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures.
 - (d) Combustion controls and monitoring.
 - (e) Operation of air pollution control equipment and factors affecting performance (where applicable).
 - (f) Inspection and maintenance of the incinerator and air pollution control devices.
 - (g) Actions to correct malfunctions or conditions that may lead to malfunction.
 - (h) Bottom and fly ash characteristics and handling procedures.
 - (i) Applicable federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards.
 - (j) Pollution prevention.
 - (k) Waste management practices.



a.

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- E. <u>Operator Training and Qualification</u> (continued)
 - 1. What are the operator training and qualification requirements? (continued)
 - c. Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of 40 CFR 62.14565a. (40 CFR 62.14565a(c)) (continued)
 - (2) An examination designed and administered by the instructor. (40 CFR 62.14565a(c)(2))
 - (3) Written material covering the training course topics that can serve as reference material following completion of the course. (40 CFR 62.14565a(c)(3))
 - 2. When must the operator training course be completed?
 - The operator training course must be completed by the later of the three dates specified in paragraphs (a)(1) through (3) of 40 CFR 62.14570a. (40 CFR 62.14570a(a)(1) through (3))
 - (1) 30 days after date of publication in the Federal Register.
 - (2) Six months after CISWI startup; or
 - (3) Six months after an employee assumes responsibility for operating the CISWI or assumes responsibility for supervising the operation of the CISWI.
 - 3. How does the Permittee obtain operator qualification?
 - a. The Permittee must obtain operator qualification by completing a training course that satisfies the criteria under 40 CFR 62.14565a(b). (40 CFR 62.14575a(a))
 - b. Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under 40 CFR 62.14565a(c)(2). (40 CFR 62.14575a(b))
 - 4. How does the facility maintain operator qualification? To maintain qualification, the Permittee must complete an annual review or refresher course covering, at a minimum, the five
 - topics described below. (40 CFR 62.14580a(a) through (e))
 - a. Update of regulations.
 - b. Incinerator operation, including startup and shutdown procedures, waste charging, and ash handling.
 - c. Inspection and maintenance.
 - d. Responses to malfunctions or conditions that may lead to malfunction.
 - e. Discussion of operating problems encountered by attendees.

5. How does the facility renew lapsed operator qualification?

The Permittee must renew a lapsed operator qualification by one of the two methods: (40 CFR 62.14585a(a) and (b))

- a. For a lapse of less than 3 years, the Permittee must complete a standard annual refresher course described in 40 CFR 62.14580a.
- b. For a lapse of 3 years or more, the Permittee must repeat the initial qualification requirements in 40 CFR 62.14575a(a).



a.

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E. <u>Operator Training and Qualification</u> (continued)

- 6. What site-specific documentation is required?
 - Documentation must be available at the facility and readily accessible for all CISWI operators that addresses the ten topics described in paragraphs (a)(1) through (10) of 40 CFR 62.14590a. The Permittee must maintain this information and the training records required by paragraph (c) of 40 CFR 62.14590a in a manner that they can be readily accessed and are suitable for inspection upon request. (40 CFR 62.14590a(a)(1) through (10))
 - (1) Summary of the applicable standards under this subpart.
 - (2) Procedures for receiving, handling, and charging waste.
 - (3) Incinerator startup, shutdown, and malfunction procedures.
 - (4) Procedures for maintaining proper combustion air supply levels.
 - (5) Procedures for operating the incinerator and associated air pollution control systems within the standards established under Subpart IIIa.
 - (6) Monitoring procedures for demonstrating compliance with the incinerator operating limits.
 - (7) Reporting and recordkeeping procedures.
 - (8) The waste management plan required under 40 CFR 62.14550a through 62.14560a.
 - (9) Procedures for handling ash.
 - (10) A list of the wastes burned during the performance test.
 - b. The Permittee must establish a program for reviewing the information listed in paragraph (a) of 40 CFR 62.14590a with each employee who operates the incinerator. (40 CFR 62.14590a(b))
 - (1) The initial review of the information listed in paragraph (a) of this section must be conducted by the later of the three dates specified below. (40 CFR 62.14590a(b)(1)(i) through (iii))
 - (a) 30 days after date of publication in the Federal Register.
 - (b) Six months after CISWI startup.
 - (c) Six months after being assigned to operate the CISWI.
 - (2) Subsequent annual reviews of the information listed in paragraph (a) of this section must be conducted no later than 12 months following the previous review. (40 CFR 62.14590a(b)(2))
 - c. The Permittee must also maintain the information specified below: (40 CFR 62.14590a(c))
 - (1) Records showing the names of all plant personnel who operate the CISWI who have completed review of the information in 40 CFR 62.14590a(a) as required by 40 CFR 62.14590a(b), including the date of the initial review and all subsequent annual reviews. (40 CFR 62.14590a(c)(1))
 - (2) Records showing the names of all plant personnel who operate the CISWI who have completed the operator training requirements under 40 CFR 62.14565a, met the criteria for qualification under 40 CFR 62.14575a, and maintained or renewed their qualification under 40 CFR 62.14580a or 40 CFR 62.14585a. Records must include documentation of training, the dates of the initial refresher training, and the dates of their qualification and all subsequent renewals of such qualifications. (40 CFR 62.14590a(c)(2))
 - (3) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
 (40 CFR 62.14590a(c)(3))



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E. <u>Operator Training and Qualification</u> (continued)

What if all the qualified operators are temporarily not accessible? If all qualified operators are temporarily not accessible (i.e., not at the facility and not able to be at the facility within 1 hour), the Permittee must meet one of the two criteria specified in paragraphs (a) and (b) of 40 CFR 62.14595a, depending on the length of time that a qualified operator is not accessible. (40 CFR 62.14595a)

- a. When all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the CISWI may be operated by other plant personnel familiar with the operation of the CISWI who have completed a review of the information specified in 40 CFR 62.14590a(a) within the past 12 months. However, the Permittee must record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under 40 CFR 62.14705a. (40 CFR 62.14595a(a))
- b. When all qualified operators are not accessible for 2 weeks or more, the Permittee must take the two actions that are described below. (40 CFR 62.14595a(b))
 - (1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what the Permittee is doing to ensure that a qualified operator is accessible, and when the Permittee anticipates that a qualified operator will be accessible. (40 CFR 62.14595a(b)(1))
 - (2) Submit a status report to the Administrator every 4 weeks outlining what the Permittee is doing to ensure that a qualified operator is accessible, stating when the Permittee anticipates that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the CISWI. The Permittee must submit the first status report 4 weeks after the Permittee notifies the Administrator of the deviation under paragraph (b)(1) of 40 CFR 62.14595a. If the Administrator notifies the Permittee that the request to continue operation of the CISWI is disapproved, the CISWI may continue operation for 90 days, then must cease operation. Operation of the unit may resume if the Permittee meets the two requirements in paragraphs (b)(2)(i) and (ii) of 40 CFR 62.14595a. (40 CFR 62.14595a(b)(2))
 - (i) A qualified operator is accessible as required under 40 CFR 62.14565a(a). (40 CFR 62.14595a(b)(2)(i))
 - (ii) The Permittee notifies the Administrator that a qualified operator is accessible and that you are resuming operation. (40 CFR 62.14595a(b)(2)(ii))
- F. Emission Limitation and Operating Limits

a.

- 1. What emission limitation must the Permittee meet and by when? The Permittee must meet the emission limitations for each CISWI specified in Table 6 to Subpart IIIa by 30 days after date of publication in the Federal Register. The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction. (40 CFR 62.14600a(a))
- 2. What operating limits must the Permittee meet and by when?
 - The Permittee must meet the operating limits established on the date that the performance test report is submitted to the EPA's Central Data Exchange or postmarked, per the requirements of 40 CFR 62.14730a(b). (40 CFR 62.14605a(b))



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F. <u>Emission Limitation and Operating Limits</u> (continued)

- What operating limits must the Permittee meet and by when? (continued)
 - b. The Permittee must establish the PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of 40 CFR 62.14605a: (40 CFR 62.14605a(i))
 - (1) During the initial performance test or any subsequent performance test that demonstrates compliance with the PM limit, record all hourly average output values (milliamps, or the digital signal equivalent) from the PM CPMS for the periods corresponding to the test runs (e.g., three 1-hour average PM CPMS output values for three 1-hour test runs): (40 CFR 62.14605a(i)(1))
 - (a) The PM CPMS must provide a 4-20 milliamp output, or the digital signal equivalent, and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps or digital bits; (40 CFR 62.14605a(i)(1)(i))
 - (b) The PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times the allowable emission limit. If the PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times the allowable emission limit; and (40 CFR 62.14605a(i)(1)(ii))
 - (c) During the initial performance test or any subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values, or their digital equivalent, from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all the PM CPMS output values for three corresponding 2-hour Method 5 or Method 29 PM test runs). (40 CFR 62.14605a(i)(1)(iii))
 - (2) If the average of the three PM performance test runs are below 75 percent of the PM emission limit, the Permittee must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS output values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or Method 29 performance test with the procedures below: (40 CFR 62.14605a(i)(2))
 - (a) Determine the instrument zero output with one of the following procedures: (40 CFR 62.14605a(i)(2)(i))
 - (i) Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench; (40 CFR 62.14605a(i)(2)(i)(A))
 - (ii) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air; (40 CFR 62.14605a(i)(2)(i)(B))
 - (iii) The zero point can also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when the process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept; and (40 CFR 62.14605a(i)(2)(i)(C))



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F. <u>Emission Limitation and Operating Limits</u> (continued)

- What operating limits must the Permittee meet and by when? (continued)
 - b. The Permittee must establish the PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of 40 CFR 62.14605a: (40 CFR 62.14605a(i)) (continued)
 - (2) If the average of the three PM performance test runs are below 75 percent of the PM emission limit, the Permittee must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS output values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or Method 29 performance test with the procedures below: (40 CFR 62.14605a(i)(2)) (continued)
 - (a) Determine the instrument zero output with one of the following procedures: (40 CFR 62.14605a(i)(2)(i)) (continued)
 - (iv) If none of the steps in paragraphs (i)(2)(i)(A) through (C) of 40 CFR 62.14605a are possible, the Permittee must use a zero output value provided by the manufacturer. (40 CFR 62.14605a(i)(2)(i)(D))
 - (b) Determine the PM CPMS instrument average in milliamps, or the digital equivalent, and the average of the corresponding three PM compliance test runs, using Equation 1: (40 CFR 62.14605a(i)(2)(ii))

$$\bar{x} = \frac{1}{n} \sum_{i=1}^{n} X_{1}, \bar{y} = \frac{1}{n} \sum_{i=1}^{n} Y_{a}$$
 (Eq. 1)

Where:

- X_1 = the PM CPMS output data points for the three runs constituting the performance test,
- Y_1 = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

(c) With the instrument zero expressed in milliamps, or the digital equivalent, the three run average PM CPMS milliamp value, or its digital equivalent, and your three run average PM concentration from the three compliance tests, determine a relationship of mg/dscm per milliamp or digital signal equivalent, with Equation 2: (40 CFR 62.14605a(i)(2)(iii))

$$R = Z + \frac{Y_1}{(X_1 - z)}$$
 (Eq. 2)

Where:

- R = the relative mg/dscm per milliamp, or the digital equivalent, for the PM CPMS,
- Y1 = the three run average mg/dscm PM concentration,
- X1 = the three run average milliamp output, or the digital equivalent, from the PM CPMS, and
- Z = the milliamp or digital signal equivalent of your instrument zero determined from paragraph (i)(2)(i) of 40 CFR 62.14605a.



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F. <u>Emission Limitation and Operating Limits</u> (continued)

- What operating limits must the Permittee meet and by when? (continued)
 - b. The Permittee must establish the PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of 40 CFR 62.14605a: (40 CFR 62.14605a(i)) (continued)
 - (2) If the average of the three PM performance test runs are below 75 percent of the PM emission limit, the Permittee must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS output values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or Method 29 performance test with the procedures below: (40 CFR 62.14605a(i)(2)) (continued)
 - (d) Determine your source specific 30-day rolling average operating limit using the mg/dscm per milliamp value, or per digital signal equivalent, from equation 2 to paragraph (i)(2)(iii) in equation 3 to this paragraph (i)(2)(iv), below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit: (40 CFR 62.14605a(i)(2)(iv))

$$O_1 = Z + \frac{075(L)}{R}$$
 (Eq. 3)

Where:

- O_1 = the operating limit for the PM CPMS on a 30-day rolling average, in milliamps or their digital signal equivalent,
- L = the source emission limit expressed in mg/dscm,
- z = the instrument zero in milliamps or digital equivalent, determined from paragraph (i)(2)(i) of 40 CFR 62.14605a, and
- R = the relative mg/dscm per milliamp, or per digital signal output equivalent, for your PM CPMS, from equation 2 to paragraph (i)(2)(iii).
- (3) If the average of the three PM compliance test runs is at or above 75 percent of the PM emission limit the Permittee must determine the operating limit by averaging the PM CPMS milliamp or digital signal output corresponding to the three PM performance test runs that demonstrate compliance with the emission limit using Equation 4 to this paragraph (i)(3) and must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (i)(5) of 40 CFR 62.14605a: (40 CFR 62.14605a(i)(3))

$$O_h = \frac{1}{n} \sum_{i=1}^n X_1$$
 (Eq. 4)

Where:

 X_1 = the PM CPMS data points for all runs i,

n = the number of data points, and

 O_h = the site specific operating limit, in milliamps or digital signal equivalent.



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F. Emission Limitation and Operating Limits (continued)

- What operating limits must the Permittee meet and by when? (continued)
 - b. The Permittee must establish the PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of 40 CFR 62.14605a: (40 CFR 62.14605a(i)) (continued)
 - (4) To determine continuous compliance, the Permittee must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. The Permittee must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (e.g., milliamps or digital signal bits, PM concentration, raw data signal) on a 30-day rolling average basis. (40 CFR 62.14605a(i)(4))
 - (5) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g., beta attenuation), span of the instruments primary analytical range, milliamp or digital signal value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital signals corresponding to each PM compliance test run. (40 CFR 62.14605a(i)(5))

G. Performance Testing

- How does the Permittee conduct the initial and annual performance test?
 - a. All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations. (40 CFR 62.14615a(a))
 - b. The Permittee must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in 40 CFR 62.14675a(b)(1)) and the types of waste burned during the performance test. (40 CFR 62.14615a(b))
 - c. All performance tests must be conducted using the minimum run duration specified in Table 6 of Subpart IIIa. (40 CFR 62.14615a(c))



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G. <u>Performance Testing</u> (continued)

How does the Permittee conduct the initial and annual performance test? (continued)

c. All performance tests must be conducted using the minimum run duration specified in Table 6 of Subpart IIIa. (40 CFR 62.14615a(c)) (continued)

Table 6 of 40 CFR Part 62 Subpart IIIa			l
For the air pollutant	The Permittee must meet this emission limitation	Using this averaging time	And determining compliance using this method
Cadmium	0.0014 milligrams per dry standard cubic meter.2	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 of Appendix A-8 to 40 CFR Part 60).
Dioxins/furans (total mass basis)	1.3 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 4 dry standard cubic meters)	Performance test (Method 23 of Appendix A-7 to 40 CFR Part 60).
Dioxins/furans (toxic equivalency basis)	0.075 nanograms per dry standard cubic meter. ²	3-run average (collect a minimum volume of 4 dry standard cubic meters)	Performance test (Method 23 of Appendix A-7 to 40 CFR Part 60).
Hydrogen chloride	3.0 parts per million dry volume. ²	30-day rolling average if HCl CEMS is being used	HCl CEMS as specified in 40 CFR 62.14670(j).
Lead	0.014 milligrams per dry standard cubic meter.2	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 of Appendix A-8 to 40 CFR Part 60).
Mercury	0.011 milligrams per dry standard cubic meter Or 58 pounds/million tons of clinker	30-day rolling average	Integrated sorbent trap monitoring system (Performance Specification 12B of Appendix B to 40 CFR Part 60 and Procedure 5 of Appendix F to 40 CFR Part 60), as specified in 40 CFR 62.14670(j).
Particulate matter filterable	13.5 milligrams per dry standard cubic meter	30-day rolling average	PM CPMS (as specified in 40 CFR 62.14670(x))

All emission limitations are measured at 7 percent oxygen (except for CEMS and integrated sorbent trap monitoring system data during startup and shutdown), dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

² In lieu of performance testing, you may use a CEMS or, for mercury, an integrated sorbent trap monitoring system, to demonstrate initial and continuing compliance with an emissions limit, as long as you comply with the CEMS or integrated sorbent trap monitoring system requirements applicable to the specific pollutant in 40 CFR 62.14640a and 40 CFR 62.14665a. As prescribed in 40 CFR 62.14640a(u), if the Permittee uses a CEMS or integrated sorbent trap monitoring system to demonstrate compliance with an emissions limit, the averaging time is a 30-day rolling average of 1-hour arithmetic average emission concentrations.

³ Alkali bypass and in-line coal mill stacks are subject to performance testing only, as specified in 62.14640a(y)(3). They are not subject to the CEMS, integrated sorbent trap monitoring system, or CPMS requirements that otherwise may apply to the main kiln exhaust.



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G. <u>Performance Testing</u> (continued)

- How does the Permittee conduct the initial and annual performance test? (continued)
 - d. Method 1 of 40 CFR Part 60, Appendix A-1 must be used to select the sampling location and number of traverse points. (40 CFR 62.14615a(d))
 - e. Method 3A of 40 CFR Part 60, Appendix A-1 must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A must be used simultaneously with each method (except when using Method 9 of 40 CFR Part 60, Appendix A-4 and Method 22 of 40 CFR Part 60, Appendix A-7). (40 CFR 62.14615a(e))
 - f. All pollutant concentrations, except for opacity, must be adjusted to 7 percent oxygen using equation 5 to this paragraph (f): (40 CFR 62.14615a(f))

$$C_{adj} = C_{meas} (20.9-7)/(20.9-\%O_2) (Eq. 5)$$

Where:

 C_{adj} = pollutant concentration adjusted to 7 percent oxygen;

 C_{meas} = pollutant concentration measured on a dry basis;

(20.9-7) = 20.9 percent oxygen-7 percent oxygen (defined oxygen correction basis);

20.9 =oxygen concentration in air, percent; and

 $%O_2 = oxygen$ concentration measured on a dry basis, percent.

- g. The Permittee must determine dioxins/furans toxic equivalency by following the procedures: (40 CFR 62.14615a(g))
 - Measure the concentration of each dioxin/furan (tetra- through octa-) isomer emitted using EPA Method 23 of 40 CFR Part 60, Appendix A-7. (40 CFR 62.14615a(g)(1))
 - (2) Quantify isomers meeting identification criteria in Section 11.4.3.4 of Method 23 of 40 CFR Part 60, Appendix A-7, regardless of whether the isomers meet identification criteria in Section 11.4.3.4.1 of Method 23. The Permittee must quantify the isomers per Section 11.4.3.5 of Method 23. [Note: The Permittee may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria in Section 11.4.3.4 of Method 23.]. (40 CFR 62.14615a(g)(2))
 - (3) For each dioxin/furan (tetra- through octa-chlorinated) isomer measured in accordance with paragraph (g)(1) and (2) of this section, multiply the isomer concentration by its corresponding toxic equivalency factor specified in table 2 to this subpart; and (40 CFR 62.14615a(g)(3))
 - (4) Sum the products calculated in accordance with paragraph (g)(3) of 40 CFR 62.14615a(g) to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency. (40 CFR 62.14615a(g)(4))
- h. Method 22 of 40 CFR Part 60, Appendix A-7 must be used to determine compliance with the fugitive ash emission limit Table 6 to Subpart IIIa. (40 CFR 62.14615a(h))
- i. The Permittee must determine dioxins/furans total mass basis by following the procedures below: (40 CFR 62.14615a(j))
 - Measure the concentration of each dioxin/furan tetra- through octa-chlorinated isomer emitted using EPA Method 23 of 40 CFR Part 60, Appendix A-7; (40 CFR 62.14615a(j)(1))
 - (2) Quantify isomers meeting identification criteria in Section 11.4.3.4 of Method 23 of 40 CFR Part 60, Appendix A-7, regardless of whether the isomers meet identification criteria in Section 11.4.3.4.1 of Method 23. (Note: The Permittee may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria in Section 11.4.3.4 of Method 23.); and (40 CFR 62.14615a(j)(2))
 - (3) Sum the quantities measured in accordance with paragraphs (j)(1) and (2) of 40 CFR 62.14615a to obtain the total concentration of dioxins/furans emitted in terms of total mass basis. (40 CFR 62.14615a(j)(3))



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Section VI. <u>Federal Plan Requirements – 40 CFR Part 62 Subpart IIIa – Commercial and</u> <u>Industrial Solid Waste Incineration Units That Commenced Construction on or</u> <u>Before June 4, 2010 and Have Not Been Modified or Reconstructed Since August</u> <u>7, 2013</u> (continued)

G. <u>Performance Testing</u> (continued)

- How are the performance test data used?
 The Permittee uses results of performance tests to demonstrate compliance with the emission limitations in Table 6 to Subpart IIIa.
- H. Initial Compliance Requirements
 - The Permittee must conduct an initial performance test to determine compliance with the emission limitations in Table 6 to Subpart IIIa, to establish the kiln-specific emission limit in 40 CFR 62.14640a(y), as applicable, and to establish operating limits using the procedure in 40 CFR 62.14605a or 40 CFR 62.14610a. The initial performance test must be conducted using the test methods listed in Table 6 to Subpart IIIa and the procedures in 40 CFR 62.14615a. The use of the bypass stack during a performance test shall invalidate the performance test. (40 CFR 62.14625a)

As an alternative to conducting a performance test, as required under 40 CFR 62.14615a and 62.14600a, the Permittee may use a 30-day rolling average of the 1-hour arithmetic average CEMS data, including CEMS data during startup and shutdown as defined in Subpart IIIa, to determine compliance with the emission limitations in Table 6 to Subpart IIIa. The Permittee must conduct a performance evaluation of each continuous monitoring system within 180 days of installation of the monitoring system. The initial performance evaluation must be conducted prior to collecting CEMS data that will be used for the initial compliance demonstration. (40 CFR 62.14625a)

- 2. By what date must the Permittee conduct initial performance test?
 - a. The initial performance test must be conducted no later than 180 days after the final compliance date. The final compliance date is 30 days after date of publication in the Federal Register, or the date the Permittee restarts the CISWI if later than 30 days after date of publication in the Federal Register. (40 CFR 62.14630a(a))
 - b. If the Permittee commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and conducted a test consistent with the provisions of Subpart IIIa while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, the Permittee does not need to retest until 6 months from the date the Permittee reintroduce that solid waste. (40 CFR 62.14630a(b))
 - c. If the Permittee commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and have not conducted a performance test consistent with the provisions of Subpart IIIa while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, the Permittee must conduct a performance test within 60 days from the date the Permittee reintroduce solid waste. (40 CFR 62.14630a(c))
- 3. By what date must the Permittee conduct the initial air pollution control device inspection?
 - a. The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI reaches the charge rate at which it will operate, but no later than 180 days after 30 days after date of publication in the Federal Register. (40 CFR 62.14635a(a))
 - b. Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed. (40 CFR 62.14635a(b))



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I. <u>Continuous Compliance Requirements</u>

- How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits?
 - a. *Compliance with standards.*
 - (1) The emission standards and operating requirements set forth in Subpart IIIa apply at all times. (40 CFR 62.14640a(a)(1))
 - (2) If the Permittee cease combusting solid waste the Permittee may opt to remain subject to the provisions of Subpart IIIa. Consistent with the definition of CISWI, the Permittee is subject to the requirements of Subpart IIIa at least 6 months following the last date of solid waste combustion. Solid waste combustion is ceased when solid waste is not in the combustion chamber (i.e., the solid waste feed to the combustor has been cut off for a period of time not less than the solid waste residence time). (40 CFR 62.14640a(a)(2))
 - (3) If the Permittee cease combusting solid waste, the Permittee must be in compliance with any newly applicable standards on the effective date of the waste-to-fuel switch. The effective date of the waste-to-fuel switch is a date selected by the Permittee, that must be at least 6 months from the date that cease combusting solid waste, consistent with paragraph (a)(2) of 40 CFR 62.14640a. The Permittee's source must remain in compliance with Subpart IIIa until the effective date of the waste-to-fuel switch. (40 CFR 62.14640a(a)(3))
 - (4) The Permittee of an existing commercial or industrial combustion unit that combusted a fuel or non-waste material, and commence or recommence combustion of solid waste, the Permittee is subject to the provisions of Subpart IIIa as of the first day the Permittee introduce or reintroduce solid waste to the combustion chamber, and this date constitutes the effective date of the fuel-to-waste switch. The Permittee must complete all initial compliance demonstrations for any Section 112 standards that are applicable to the facility before the Permittee commence or recommence combustion of solid waste. The Permittee must provide 30 days prior notice of the effective date of the waste-to-fuel switch. The notification must identify: (40 CFR 62.14640a(a)(4))
 - (i) The name of the Permittee of the CISWI, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice; (40 CFR 62.14640a(a)(4)(i))
 - (ii) The currently applicable subcategory under Subpart IIIa, and any 40 CFR Part 63 subpart and subcategory that will be applicable after the Permittee cease combusting solid waste; (40 CFR 62.14640a(a)(4)(ii))
 - (iii) The fuel(s), non-waste material(s) and solid waste(s) the CISWI is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting; (40 CFR 62.14640a(a)(4)(iii))
 - (iv) The date on which the Permittee became subject to the currently applicable emission limits; (40 CFR 62.14640a(a)(4)(iv))
 - (v) The date upon which the Permittee will cease combusting solid waste, and the date (if different) that the Permittee intend for any new requirements to become applicable (i.e., the effective date of the waste-to-fuel switch), consistent with paragraphs (a)(2) and (3) of 40 CFR 62.14640a. (40 CFR 62.14640a(a)(4)(v))
 - (5) All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch. (40 CFR 62.14640a(a)(5))



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- How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)
 - b. The Permittee must conduct an annual performance test for the pollutants listed in Table 6 to Subpart IIIa. The annual performance test must be conducted using the test methods listed in Table 6 to Subpart IIIa and the procedures in 40 CFR 62.14615a. Annual performance tests are not required if the Permittee use CEMS or continuous opacity monitoring systems to determine compliance. (40 CFR 62.14640a(b))
 - c. The Permittee must continuously monitor the operating parameters specified in 40 CFR 62.14605a or established under 40 CFR 62.14610a. Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour block average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under 40 CFR 62.14610a or, for energy recovery units, where the averaging time for each operating parameter is a 30-day rolling average, calculated each hour as the average of the previous 720 operating hours. Operation above the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of 40 CFR 62.14640a constitutes a deviation from the operating limits established under Subpart IIIa, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. (40 CFR 62.14640a(c))
 - d. For facilities using a CEMS to demonstrate compliance with the carbon monoxide emission limit, compliance with the carbon monoxide emission limits may be demonstrated by using the CEMS, as described in 40 CFR 60.14665a(o). (40 CFR 62.14640a(g))
 - e. For waste-burning kilns, the Permittee must conduct an annual performance test for the pollutants (except mercury and hydrogen chloride if no acid gas wet scrubber or dry scrubber is used) listed in Table 6 to Subpart IIIa, unless the facility choose to demonstrate initial and continuous compliance using CEMS, as allowed in paragraph (u) of 40 CFR 62.14640a. The Permittee must determine compliance with the hydrogen chloride emissions limit using a HCl CEMS according to the requirements in paragraph (j)(1) of this sectio40 CFR 62.14640a. The Permittee must determine compliance with the mercury emissions limit using a mercury CEMS or an integrated sorbent trap monitoring system according to paragraph (j)(2) of 40 CFR 62.14640a. The Permittee must determine compliance with particulate matter using a PM CPMS according to paragraph (x) of this 40 CFR 62.14640a. (40 CFR 62.14640a(j))



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I. <u>Continuous Compliance Requirements</u> (continued)

1. How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)

e. (continued)

- (1) The Permittee must operate the HCl CEMS in accordance with Performance Specification 15 (PS 15) of 40 CFR Part 60, Appendix B, or, PS 18 of 40 CFR Part 60, Appendix B. The Permittee must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of 40 CFR Part 60, Appendix F except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of Sections 11.1.1 and 12.0 of PS 15. The Permittee must operate, maintain and quality assure a HCl CEMS installed and certified under PS 18 according to the quality assurance requirements in Procedure 6 of 40 CFR Part 60, Appendix F. For any performance specification that is used, the Permittee must use Method 321 of 40 CFR Part 63, Appendix A as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs (j)(1)(i) and (ii) of 40 CFR 62.14640a apply to all HCl CEMS used under Subpart IIIa: (40 CFR 62.14640a(j)(1))
 - (a) The Permittee must use a measurement span value for any HCl CEMS of 0-10 ppmvw unless the monitor is installed on a kiln without an inline raw mill. Kilns without an inline raw mill may use a higher span value sufficient to quantify all expected emissions concentrations. The HCl CEMS data recorder output range must include the full range of expected HCl concentration values which would include those expected during "mill off" conditions. The corresponding data recorder range shall be documented in the site-specific monitoring plan and associated records; (40 CFR 62.14640a(j)(1)(i))
 - (b) In order to quality assure data measured above the span value, the Permittee must use one of the three options in paragraphs (j)(1)(ii)(A) through (C) of 40 CFR 62.14640a: (40 CFR 62.14640a(j)(1)(ii))
 - (i) Include a second span that encompasses the HCl emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of 5 ppm of total HCl. The requirements of the appropriate HCl monitor performance specification shall be followed for this second span with the exception that a RATA with the mill off is not required; (40 CFR 62.14640a(j)(1)(ii)(A))
 - (ii) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (j)(1)(i) of this section using the following procedure. Conduct a weekly "above span linearity" calibration challenge of the monitoring system using a reference gas with a certified value greater than the highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The "above span" reference gas must meet the requirements of the applicable performance specification and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The "above span linearity" challenge is successful if the value measured by the HCl CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the HCl CEMS during the above span linearity challenge exceeds 10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new "above span linearity" challenge met before returning the HCl CEMS to service, or data above span from the HCl CEMS must be subject to the quality assurance procedures established in (j)(1)(ii)(D) of 40 CFR 62.14640a. In this manner values measured by the HCl CEMS during the above span linearity challenge exceeding +/-20 percent of the certified value of the reference gas must be normalized using equation 6 to paragraph (j)(1)(ii)(D); (40 CFR 62.14640a(j)(1)(ii)(B))



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I. <u>Continuous Compliance Requirements</u> (continued)

1. How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)

e. (continued)

- (1) (continued)
 - (b) (continued)
 - Quality assure any data above the span value established in paragraph (j)(1)(i) of 40 CFR 62.14640a (iii) using the following procedure. Any time two consecutive one-hour average measured concentration of HCl exceeds the span value you must, within 24 hours before or after, introduce a higher, "above span" HCl reference gas standard to the HCl CEMS. The "above span" reference gas must meet the requirements of the applicable performance specification and target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include above span calibrations done before or after the above-span measurement period. Record and report the results of this procedure as you would for a daily calibration. The "above span" calibration is successful if the value measured by the HCl CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the HCl CEMS is not within 20 percent of the certified value of the reference gas, then the Permittee must normalize the stack gas values measured above span as described in paragraph (j)(1)(ii)(D) of 40 CFR 62.14640a. If the "above span" calibration is conducted during the period when measured emissions are above span and there is a failure to collect the one data point in an hour due to the calibration duration, then the Permittee must determine the emissions average for that missed hour as the average of hourly averages for the hour preceding the missed hour and the hour following the missed hour. In an hour where an "above span" calibration is being conducted and one or more data points are collected, the emissions average is represented by the average of all valid data points collected in that hour; and (40 CFR 62.14640a(j)(1)(ii)(C))
 - (iv) In the event that the "above span" calibration is not successful (i.e., the HCl CEMS measured value is not within 20 percent of the certified value of the reference gas), then the Permittee must normalize the one-hour average stack gas values measured above the span during the 24- hour period preceding or following the "above span" calibration for reporting based on the HCl CEMS response to the reference gas as shown in equation 6 to this paragraph (j)(1)(ii)(D): (40 CFR 62.14640a(j)(1)(ii)(D))

 $\frac{Certified\ reference\ gas\ value}{Measured\ value\ of\ reference\ gass} = Measured\ stack\ gas = Normalized\ stack\ gas\ result$ (Eq. 6)

Only one "above span" calibration is needed per 24-hour period.



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I. <u>Continuous Compliance Requirements</u> (continued)

1. How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)

e. (continued)

- (2) Compliance with the mercury emissions limit must be determined using an integrated sorbent trap monitoring system according to the following requirements: (40 CFR 62.14640a(j)(2))
 - (a) The Permittee must operate an integrated sorbent trap monitoring system in accordance with performance Specification 12B of 40 CFR Part 60, Appendix B; these monitoring systems must be quality assured according to Procedure 5 of Appendix F to 40 CFR Part 60. For the purposes of emissions calculations when using an integrated sorbent trap monitoring system, the mercury concentration determined for each sampling period must be assigned to each hour during the sampling period. If the Permittee chooses to comply with the production-rate based mercury limit for the waste-burning kiln, the Permittee must also monitor hourly clinker production and determine the hourly mercury emissions rate in pounds per million ton of clinker produced. The Permittee must demonstrate compliance with the mercury emissions limit using a 30-day rolling average of these 1-hour mercury concentrations or mass emissions rates, calculated using equation 19-19 in Section 12.4.1 of EPA Reference Method 19 of 40 CFR Part 60, Appendix A-7. CEMS data during startup and shutdown, as defined in Subpart IIIa, are not corrected to 7 percent oxygen, and are measured at stack oxygen content; (40 CFR 62.14640a(j)(2)(i))
 - (b) The Permittee using an integrated sorbent trap monitoring system to determine mass emission rate must install, operate, calibrate and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specification 6 of 40 CFR Part 60, Appendix B; and (40 CFR 62.14640a(j)(2)(ii))
 - (c) The Permittee of a waste-burning kiln must demonstrate initial compliance by operating an integrated sorbent trap monitoring system while the raw mill of the in-line kiln/raw mill is operating under normal conditions and including at least one period when the raw mill is off. (40 CFR 62.14640a(j)(2)(iii))
- f. If the Permittee uses an air pollution control device to meet the emission limitations in Subpart IIIa, the Permittee must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following: (40 CFR 62.14640a(k))
 - (1) Inspect air pollution control device(s) for proper operation; and (40 CFR 62.14640a(k)(1))
 - (2) Develop a site-specific monitoring plan according to the requirements in paragraph (l) of 40 CFR 62.14640a. This requirement also applies if the facility petitiosn the EPA Administrator for alternative monitoring parameters under 40 CFR 60.13(i). (40 CFR 62.14640a(k)(2))



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- How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)
 - g. For each CMS required in this section, the Permittee must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of this paragraph (l) that addresses paragraphs (l)(1)(i) through (vi) of 40 CFR 62.14640a: (40 CFR 62.14640a(l))
 - (1) The Permittee must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the continuous monitoring system: (40 CFR 62.14640a(l)(1))
 - (a) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device); (40 CFR 62.14640a(l)(1)(i))
 - (b) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; (40 CFR 62.14640a(l)(1)(ii))
 - (c) Performance evaluation procedures and acceptance criteria (e.g., calibrations); (40 CFR 62.14640a(l)(1)(iii))
 - (d) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 60.11(d); (40 CFR 62.14640a(l)(1)(iv))
 - (e) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 60.13; and (40 CFR 62.14640a(l)(1)(v))
 - (f) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 60.7(b),(c) introductory text, (c)(1), (c)(4), (d), (e), (f) and (g). (40 CFR 62.14640a(l)(1)(vi))
 - (2) The Permittee must conduct a performance evaluation of each continuous monitoring system in accordance with the site-specific monitoring plan. (40 CFR 62.14640a(l)(2))
 - (3) The Permittee must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan. (40 CFR 62.14640a(l)(3))
 - h. If the Permittee has an operating limit that requires the use of a flow monitoring system, the Permittee must meet the requirements below: (40 CFR 62.14640a(m))
 - (1) Install the flow sensor and other necessary equipment in a position that provides a representative flow; (40 CFR 62.14640a(m)(1))
 - (2) Use a flow sensor with a measurement sensitivity at full scale of no greater than 2 percent; (40 CFR 62.14640a(m)(2))
 - (3) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; and(40 CFR 62.14640a(m)(3))
 - (4) Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually. (40 CFR 62.14640a(m)(4))



i.

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- How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)
 - For facilities using a CEMS to demonstrate initial and continuous compliance with the sulfur dioxide (SO₂) emission limit, compliance with the sulfur dioxide emission limit may be demonstrated by using the CEMS specified in 40 CFR 62.14665a(l) to measure sulfur dioxide. The sulfur dioxide CEMS must follow the procedures and methods specified in paragraph (s) of 40 CFR 62.14640a. For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide CEMS should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the CEMS, whichever is greater: (40 CFR 62.14640a(s))
 - (1) During each relative accuracy test run of the CEMS required by performance Specification 2 of 40 CFR Part 60, Appendix B, collect sulfur dioxide and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60minute period) with both the CEMS and the test methods specified below: (40 CFR 62.14640a(s)(1))
 - (a) For sulfur dioxide, EPA Reference Method 6 or 6C of 40 CFR Part 60, Appendix A-4, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus] must be used (see paragraph (z) of 40 CFR 62.14640a); and (40 CFR 62.14640a(s)(1)(i))
 - (b) For oxygen (or carbon dioxide), EPA Reference Method 3A of 40 CFR Part 60, Appendix A-2, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], as applicable, must be used (see paragraph (z) of 40 CFR 62.14640a). (40 CFR 62.14640a(s)(1)(ii))
 - (2) The span value of the CEMS at the inlet to the sulfur dioxide control device must be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this rule. The span value of the CEMS at the outlet of the sulfur dioxide control device must be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this rule. (40 CFR 62.14640a(s)(2))
 - (3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 of 40 CFR Part 60, Appendix F. (40 CFR 62.14640a(s)(3))
 - j. For facilities using a CEMS to demonstrate initial and continuous compliance with the nitrogen oxides emission limit, compliance with the nitrogen oxides emission limit may be demonstrated by using the CEMS specified in 40 CFR 62.14665a to measure nitrogen oxides. The nitrogen oxides CEMS must follow the procedures and methods specified below: (40 CFR 62.14640a(t))
 - (1) During each relative accuracy test run of the CEMS required by performance Specification 2 of 40 CFR Part 60, Appendix B collect nitrogen oxides and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60minute period) with both the CEMS and the test methods specified below: (40 CFR 62.14640a(t)(1))
 - (a) For nitrogen oxides, EPA Reference Method 7 or 7E of 40 CFR Part 60, appendix A-4 must be used; and (40 CFR 62.14640a(t)(1)(i))
 - (b) For oxygen (or carbon dioxide), EPA Reference Method 3A of 40 CFR part 60, appendix A-2, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], as applicable, must be used (see paragraph (z) of this section). (40 CFR 62.14640a(t)(1)(ii))



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- How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)
 - j. For facilities using a CEMS to demonstrate initial and continuous compliance with the nitrogen oxides emission limit, compliance with the nitrogen oxides emission limit may be demonstrated by using the CEMS specified in 40 CFR 62.14665a to measure nitrogen oxides. The nitrogen oxides CEMS must follow the procedures and methods specified below: (40 CFR 62.14640a(t)) (continued)
 - (2) The span value of the CEMS must be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of unit. (40 CFR 62.14640a(t)(2))
 - (3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with Procedure 1 of 40 CFR Part 60, Appendix F. (40 CFR 62.14640a(t)(3))
 - (4) The Permittee may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels must be established during the initial performance test according to the procedures and methods specified below. This relationship may be reestablished during performance compliance tests: (40 CFR 62.14640a(t)(4))
 - (a) The fuel factor equation in Method 3B of 40 CFR part 60, appendix A-2 must be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3A of 40 CFR part 60, appendix A-2, or as an alternative ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], as applicable, must be used to determine the oxygen concentration at the same location as the carbon dioxide monitor (see paragraph (z) of this section); (40 CFR 62.14640a(t)(4)(i))
 - (b) Samples must be taken for at least 30 minutes in each hour; (40 CFR 62.14640a(t)(4)(ii))
 - (c) Each sample must represent a 1-hour average; and (40 CFR 62.14640a(t)(4)(iii))
 - (d) A minimum of 3 runs must be performed. (40 CFR 62.14640a(t)(4)(iv))
 - k. For facilities using an integrated sorbent trap monitoring system for mercury to demonstrate initial and continuous compliance with any of the emission limits of Subpart IIIa, the Permittee must complete the following: (40 CFR 62.14640a(u))
 - (1) Demonstrate compliance with the appropriate emission limit(s) using a 30-day rolling average of 1-hour arithmetic average emission concentrations, including an integrated sorbent trap monitoring system data during startup and shutdown, as defined in Subpart IIIa, calculated using Equation 19-19 in Section 12.4.1 of EPA Reference Method 19 of 40 CFR Part 60, Appendix A-7. Except for an integrated sorbent trap monitoring system data during startup and shutdown, the 1-hour arithmetic averages used to calculate the 30-day rolling average emission concentrations must be corrected to 7 percent oxygen (dry basis). Integrated sorbent trap monitoring system data during startup and shutdown, as defined in Subpart IIIa, are not corrected to 7 percent oxygen, and are measured at stack oxygen content; and (40 CFR 62.14640a(u)(1))
 - (2) Operate the integrated sorbent trap monitoring systems in accordance with the applicable procedures under of 40 CFR Part 60, Appendices B and F. (40 CFR 62.14640a(u)(2))



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- How does the Permittee demonstrate continuous compliance with the emission limitations and the operating limits? (continued)
 - Incorporation by reference. These standards are incorporated by reference into this section with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. All approved material is available for inspection at the U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272-0167, http://www.epa.gov. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. (40 CFR 62.14640a(z))
 - (1) American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (Phone: 1-800-843-2763; Website: https://www.asme.org/). (40 CFR 62.14640a(z)(1))
 - (a) ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]. (40 CFR 62.14640a(z)(1)(i))
 - (2) ASTM Int'l, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106 (Phone: 1-877-909-2786; Website: http://www.astm.org/). (40 CFR 62.14640a(z)(2))
 - (a) ASTM D6784-24 Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved April 16, 2024. (40 CFR 62.14640a(z)(2)(i))
 - (3) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272-0167, http://www.epa.gov. (40 CFR 62.14640a(z)(3))
 - (a) OAQPS Fabric Filter Bag Leak Detection Guidance, EPA-454/R-98-015, September 1997. (40 CFR 62.14640a(z)(3)(i))
- By what date must the Permittee conduct the annual performance test? The Permittee must conduct annual performance tests between 11 and 13 calendar months of the previous performance test. (40 CFR 62.14645a))
- 3. By what date must the Permittee conduct the annual air pollution control device inspection? On an annual basis (no more than 12 months following the previous annual air pollution control device inspection), the Permittee must complete the air pollution control device inspection as described in 40 CFR 62.14635a. (40 CFR 62.14650a)
- 4. May the Permittee conduct performance testing less often?
 - a. The Permittee must conduct annual performance tests according to the schedule specified in 40 CFR 62.14645a, with the following exceptions: (40 CFR62.14655a(a))
 - (1) The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits, as specified in 40 CFR 62.14660a. New operating limits become effective on the date that the performance test report is submitted to the EPA's Central Data Exchange or postmarked, per the requirements of 40 CFR 62.14730a(b). The Administrator may request a repeat performance test at any time; (40 CFR62.14655a(a)(1))
 - (2) You must repeat the performance test within 60 days of a process change, as defined in 40 CFR 62.14780a; and (40 CFR62.14655a(a)(2))



a.

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- 4. May the Permittee conduct performance testing less often?
 - The Permittee must conduct annual performance tests according to the schedule specified in 40 CFR 62.14645a, with the following exceptions: (40 CFR62.14655a(a)) (continued)
 - (3) The Permittee can conduct performance tests less often if the Permittee meets the following conditions: the performance tests for the pollutant for at least 2 consecutive performance tests demonstrates that the emission level for the pollutant is no greater than the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of 40 CFR62.14655a, as applicable; there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions; and the Permittee is not required to conduct a performance test for the pollutant in response to a request by the Administrator in paragraph (a)(1) of 40 CFR62.14655a or a process change in paragraph (a)(2) of 40 CFR62.14655a. In this case, the Permittee does not have to conduct a performance test for that pollutant for the next 2 years. The Permittee must conduct a performance test for the pollutant no more than 37 months following the previous performance test for the pollutant. If the emission level for the CISWI continues to meet the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of 40 CFR62.14655a, as applicable, the Permittee may choose to conduct performance tests for the pollutant every third year, as long as there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. Each such performance test must be conducted no more than 37 months after the previous performance test must be conducted no more than 37 months after the previous performance test must be conducted no more than 37 months after the performance test.
 - (a) For particulate matter, hydrogen chloride, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide, cadmium, lead, and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit in Table 6 to Subpart IIIa, as applicable; and (40 CFR62.14655a(a)(3)(i))
 - (b) For fugitive emissions, visible emissions (of combustion ash from the ash conveying system) for 2 percent of the time during each of the three 1-hour observation periods. (40 CFR62.14655a(a)(3)(ii))
 - (4) If the Permittee is conducting less frequent testing for a pollutant as provided in paragraph (a)(3) of 40 CFR62.14655a and a subsequent performance test for the pollutant indicates that the CISWI does not meet the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of 40 CFR62.14655a, as applicable, the Permittee must conduct annual performance tests for the pollutant according to the schedule specified in paragraph (a) of 40 CFR62.14655a until the Permittee qualify for less frequent testing for the pollutant as specified in paragraph (a) of 40 CFR62.14655a. (40 CFR62.14655a(a)(4)
- 5. May the Permittee conduct a repeat performance test to establish new operating limits?
 - Yes. The Permittee may conduct a repeat performance test at any time to establish new values for the operating limits. The Administrator may request a repeat performance test at any time. (40 CFR 62.14660a(a))
 - b. The Permittee must repeat the performance test if the feed stream is different than the feed streams used during any performance test used to demonstrate compliance. (40 CFR 62.14660a(b))



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J. <u>Monitoring</u> 1. What

- What monitoring equipment must the Permittee install and what parameters must the Permittee monitor?
 - a. For waste-burning kilns not equipped with a wet scrubber or dry scrubber, the Permittee must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions discharged to the atmosphere, as specified in 40 CFR 62.14640a(j) of Subpart IIIa, and record the output of the system. The Permittee may substitute use of a HCl CEMS for conducting the HCl initial and annual testing with EPA Method 321 of 40 CFR Part 63, Appendix A. for units other than waste- burning kilns not equipped with a wet scrubber or dry scrubber, a facility may substitute use of a HCl CEMS for conducting the HCl initial and annual performance test. For units equipped with a HCl CEMS, the Permittee is not required to monitor the minimum hydrogen chloride sorbent flow rate, monitoring the minimum scrubber liquor pH, and monitoring minimum injection rate. (40 CFR 62.14665a(g))
 - b. To demonstrate continuous compliance with the particulate matter emissions limit, a facility may substitute use of either a particulate matter CEMS or a particulate matter CPMS for conducting the particulate matter annual performance test. (40 CFR 62.14665a(h))
 - c. To demonstrate initial and continuous compliance with the dioxin/furan emissions limit, a facility must condut initial and annual performance test. The Permittee must record the output of the system and analyze the sample according to EPA Method 23 of 40 CFR Part 60, Appendix A-7. (40 CFR 62.14665a(i))
 - d. To demonstrate initial and continuous compliance with the mercury emissions limit, a facility may substitute use of an integrated sorbent trap monitoring system for the mercury initial and annual performance test. The Permittee who elects to continuously sample mercury emissions instead of sampling and testing using EPA Method 29 or 30B of 40 CFR Part 60, Appendix A-8, ASTM D6784-24 (see 40 CFR 62.14640a(z)), or an approved alternative method for measuring mercury emissions, must install, calibrate, maintain and operate the integrated sorbent trap monitoring system and must comply with Performance Specification 12A or Performance Specification 12B of 40 CFR Part 60, Appendix B, respectively, and quality assurance Procedure 5 of 40 CFR Part 60, Appendix F. For the purposes of emissions calculations when using an integrated sorbent trap monitoring system, the mercury concentration determined for each sampling period must be assigned to each hour during the sampling period. For units equipped with an integrated sorbent trap monitoring system, the Permittee is not required to monitor the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the mercury emission limit. Waste- burning kilns must install, calibrate, maintain, and operate an integrated sorbent trap monitoring system as specified in 40 CFR 62.14640a(j) of Subpart IIIa. (40 CFR 62.14665a(j))
 - e. To demonstrate initial and continuous compliance with the nitrogen oxides emissions limit, a facility may substitute use of a CEMS for the nitrogen oxides initial and annual performance test to demonstrate compliance with the nitrogen oxides emissions limits. For units equipped with a nitrogen oxides CEMS, the Permittee is not required to monitor the charge rate, secondary chamber temperature and reagent flow for selective noncatalytic reduction, if applicable: (40 CFR 62.14665a(k))
 - (1) Install, calibrate, maintain and operate a CEMS for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system. The requirements under Performance Specification 2 of 40 CFR Part 60, Appendix B, the quality assurance Procedure 1 of 40 CFR Part 60, Appendix F and the procedures under 40 CFR 60.13 must be followed for installation, evaluation and operation of the CEMS; and (40 CFR 62.14665a(k)(1))
 - (2) Compliance with the emission limit for nitrogen oxides must be determined based on the 30-day rolling average of the hourly emission concentrations using CEMS outlet data, as outlined in 40 CFR 62.14640a(u). (40 CFR 62.14665a(k)(e))



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J. <u>Monitoring</u> (continued)

1.

- What monitoring equipment must the Permittee install and what parameters must the Permittee monitor? (continued)
 - f. To demonstrate initial and continuous compliance with the sulfur dioxide emissions limit, a facility may substitute use of a CEMS for the sulfur dioxide initial and annual performance test to demonstrate compliance with the sulfur dioxide emissions limits: (40 CFR 62.14665a(1))
 - (1) Install, calibrate, maintain and operate a CEMS for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system. The requirements under Performance Specification 2 of 40 CFR Part 60, Appendix B, the quality assurance requirements of Procedure 1 of 40 CFR Part 60, Appendix F and the procedures under 40 CFR 60.13 must be followed for installation, evaluation and operation of the CEMS; and (40 CFR 62.14665a(l)(1))
 - (2) Compliance with the sulfur dioxide emission limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations using CEMS outlet data, as outlined in 40 CFR 62.14640a(u). (40 CFR 62.14665a(l)(2))
 - g. To demonstrate initial and continuous compliance with the carbon monoxide emissions limit, a facility may substitute use of a CEMS for the carbon monoxide initial and annual performance test to demonstrate compliance with the carbon monoxide emissions limits: (40 CFR 62.14665a(o))
 - (1) Install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The requirements under Performance Specification 4A or 4B of 40 CFR Part 60, Appendix B, the quality assurance Procedure 1 of 40 CFR Part 60, Appendix F and the procedures under 40 CFR 60.13 must be followed for installation, evaluation, and operation of the CEMS; and (40 CFR 62.14665a(o)(1))
 - (2) Compliance with the carbon monoxide emission limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using CEMS outlet data, as outlined in 40 CFR 62.14640a(u). (40 CFR 62.14665a(o)(2))
 - h. For waste-burning kilns, the Permittee must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of 40 CFR 62.14665a: (40 CFR 62.14665a(r))
 - (1) Install, calibrate, operate, and maintain the PM CPMS according to the procedures in the approved site-specific monitoring plan developed in accordance with 40 CFR 62.14640a(l) and (r)(1)(i) through (iii) of 40 CFR 62.14665a: (40 CFR 62.14665a(r)(1))
 - (a) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps or the digital signal equivalent; (40 CFR 62.14665a(r)(1)(i))
 - (b) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes; and (40 CFR 62.14665a(r)(1)(i)(ii))
 - (c) The PM CPMS must be capable of detecting and responding to particulate matter concentrations increments no greater than 0.5 mg/actual cubic meter. (40 CFR 62.14665a(r)(1)(i)(ii))



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J. <u>Monitoring</u> (continued)

1.

- What monitoring equipment must the Permittee install and what parameters must the Permittee monitor? (continued)
 - h. For waste-burning kilns, the Permittee must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of 40 CFR 62.14665a.: (40 CFR 62.14665a(r)) (continued)
 - (2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, the Permittee must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in 40 CFR 62.14605a. (40 CFR 62.14665a(r)(2))
 - (3) Collect PM CPMS hourly average output data for all waste- burning kiln operating hours. Express the PM CPMS output as milliamps or the digital signal equivalent. (40 CFR 62.14665a(r)(3))
 - (4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all waste-burning kiln operating hours data (milliamps or digital bits). (40 CFR 62.14665a(r)(4))
 - (5) The Permittee must collect data using the PM CPMS at all times the waste-burning kiln is operating and at the intervals specified in paragraph (r)(1)(ii) of (40 CFR 62.14665a, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in the site-specific monitoring plan. (40 CFR 62.14665a(r)(5))
 - (6) The Permittee must use all the data collected during all waste-burning kiln operating hours in assessing the compliance with the operating limit except: (40 CFR 62.14665a(r)(6))
 - (a) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in the annual deviation report); (40 CFR 62.14665a(r)(6)(i))
 - (b) Any data collected during periods when the monitoring system is out of control as specified in the sitespecific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in the annual deviation report); and (40 CFR 62.14665a(r)(6)(i)(ii))
 - (7) The Permittee must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with the site-specific monitoring plan. (40 CFR 62.14665a(r)(7))



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J. <u>Monitoring</u> (continued)

1.

- What monitoring equipment must the Permittee install and what parameters must the Permittee monitor? (continued)
 - h. For waste-burning kilns, the Permittee must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of 40 CFR 62.14665a.: (40 CFR 62.14665a(r)) (continued) (8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating
 - parameter limit, the Permittee must: (40 CFR 62.14665a(r)(8))
 - (a) Within 48 hours of the deviation, visually inspect the air pollution control device; (40 CFR 62.14665a(r)(8)(i))
 - (b) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; (40 CFR 62.14665a(r)(8)(i)(ii))
 - (c) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify the operation of the emissions control device(s). Within 45 days of the deviation, the Permittee must re-establish the CPMS operating limit. The Permittee is not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph; and (40 CFR 62.14665a(r)(8)(i)(iii))
 - (d) PM CPMS deviations leading to more than four required performance tests in a 12- month process operating period (rolling monthly) constitute a violation of Subpart IIIa. (40 CFR 62.14665a(r)(8)(i)(iv))
 - i. When the Permittee is required to monitor clinker production because the Permittee complies with the production-rate based mercury limit for the waste-burning kiln, the Permittee must: (40 CFR 62.14665a(t))
 - (1) Determine hourly clinker production by one of two methods: (40 CFR 62.14665a(t)(1))
 - (a) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy, or (40 CFR 62.14665a(t)(1)(i))
 - (b) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate the hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, the Permittee must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated. (40 CFR 62.14665a(t)(1)(ii))
 - (2) Determine the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable) before the final compliance date of this rule and during each quarter of source operation. (40 CFR 62.14665a(t)(2))
 - (3) Conduct accuracy checks in accordance with the procedures outlined in the site- specific monitoring plan under 40 CFR 62.14640a(l). (40 CFR 62.14665a(t)(3))



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J. <u>Monitoring</u> (continued)

2. Is there a minimum amount of monitoring data the Permittee must obtain?

- For each continuous monitoring system required or optionally allowed under 40 CFR 62.14665a, the Permittee must monitor and collect data according to this section: (40 CFR 62.14670a)
 - (a) The Permittee must operate the monitoring system and collect data at all required intervals at all times compliance is required except for periods of monitoring system malfunctions or out-of- control periods, repairs associated with monitoring system malfunctions or out-of-control periods (as specified in 40 CFR 62.14705a(o)), and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee is required to effect monitoring system to operation as expeditiously as practicable. (40 CFR 62.14670a(a))
 - (b) The Permittee may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. The Permittee must use all the data collected during all other periods, including data normalized for above scale readings, in assessing the operation of the control device and associated control system. (40 CFR 62.14670a(b))
 - (c) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements. (40 CFR 62.14670a(c))

K. <u>Recordkeeping and Reporting</u>

1. What records must I keep?

The Permittee must maintain the items (as applicable) as specified in paragraphs (a) through (o) of 40 CFR 62.14675a for a period of at least 5 years: (40 CFR 62.14675a)

- a. Calendar date of each record. (40 CFR 62.14675a(a))
- b. Records of the data described below: (40 CFR 62.14675a(b))
 - (1) The CISWI charge dates, times, weights, and hourly charge rates; (40 CFR 62.14675a(b)(1))
 - (2) For affected CISWI that establish operating limits for controls other than wet scrubbers under 40 CFR 62.14610a, the Permittee must maintain data collected for all operating parameters used to determine compliance with the operating limits. For energy recovery units using activated carbon injection or a dry scrubber, you must also maintain records of the load fraction and corresponding sorbent injection rate records; and (40 CFR 62.14675a(b)(5))



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K. <u>Recordkeeping and Reporting</u> (continued)

h

1. What records must I keep? (continued)

The Permittee must maintain the items (as applicable) as specified in paragraphs (a) through (o) of 40 CFR 62.14675a for a period of at least 5 years: (40 CFR 62.14675a) (continued)

- Records of the data described below: (40 CFR 62.14675a(b)) (continued)
 - (3) When the Permittee monitors clinker production in accordance with 40 CFR 62.14665a(t): (40 CFR 62.14675a(b)(7))
 - (a) Hourly clinker rate produced if clinker production is measured directly; (40 CFR 62.14675a(b)(7)(i))
 - (b) Hourly measured kiln feed rates and calculated clinker production rates if clinker production is not measured directly; (40 CFR 62.14675a(b)(7)(ii))
 - (c) 30-day rolling averages for mercury in pounds per million tons of clinker produced; (40 CFR 62.14675a(b)(7)(iii))
 - (d) The initial and quarterly accuracy of the system of measuring hourly clinker production (or feed mass flow). (40 CFR 62.14675a(b)(7)(iv))
- c. Identification of calendar dates and times for which data show a deviation from the operating limits in Table 1 to Subpart IIIa or a deviation from other operating limits established under 40 CFR 62.14605a(d) through (g) or 40 CFR 62.14610a with a description of the deviations, reasons for such deviations, and a description of corrective actions taken. (40 CFR 62.14675a(c))
- d. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations. (40 CFR 62.14675a(d))
- e. Records showing the names of CISWI operators who have completed review of the information in 40 CFR 62.14590a(a) as required by 40 CFR 62.14590(b), including the date of the initial review and all subsequent annual reviews. (40 CFR 62.14675a(e))
- f. Records showing the names of the CISWI operators who have completed the operator training requirements under 40 CFR 62.14565a, met the criteria for qualification under 40 CFR 62.14575a, and maintained or renewed their qualification under 40 CFR 62.14580a or 40 CFR 62.14585a. Records must include documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications. (40 CFR 62.14675a(f))
- g. For each qualified operator, the phone and/or pager number at which they can be reached during operating hours. (40 CFR 62.14675a(g))
- h. Records of calibration of any monitoring devices as required under 40 CFR 62.14665a. (40 CFR 62.14675a(h))
- i. Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment. (40 CFR 62.14675a(i))
- j. The information listed in 40 CFR 62.14590a(a). (40 CFR 62.14675a(j))
- k. On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required). (40 CFR 62.14675a(k))
- 1. Maintain records of the annual air pollution control device inspections that are required for each CISWI subject to the emissions limits in Table 6 to Subpart IIIa, any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency. (40 CFR 62.14675a(l))



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K. <u>Recordkeeping and Reporting</u> (continued)

1. What records must I keep? (continued)

The Permittee must maintain the items (as applicable) as specified in paragraphs (a) through (o) of 40 CFR 62.14675a for a period of at least 5 years: (40 CFR 62.14675a) (continued)

- m. For continuously monitored pollutants or parameters, the Permittee must document and keep a record of the following parameters measured using continuous monitoring systems. If the Permittee monitors emissions with a CEMS, the Permittee must indicate which data are CEMS data during startup and shutdown: (40 CFR 62.14675a(m))
 - (1) All 6-minute average levels of opacity; (40 CFR 62.14675a(m)(1))
 - (2) All 1-hour average concentrations of sulfur dioxide emissions; (40 CFR 62.14675a(m)(2))
 - (3) All 1-hour average concentrations of nitrogen oxides emissions; (40 CFR 62.14675a(m)(3))
 - (4) All 1-hour average concentrations of carbon monoxide emissions; (40 CFR 62.14675a(m)(4))
 - (5) All 1-hour average concentrations of particulate matter emissions; (40 CFR 62.14675a(m)(5))
 - (6) All 1-hour average concentrations of mercury emissions; (40 CFR 62.14675a(m)(6))
 - (7) All 1-hour average concentrations of HCl CEMS outputs; (40 CFR 62.14675a(m)(7))
 - (8) All 1-hour average percent oxygen concentrations; and (40 CFR 62.14675a(m)(8))
 - (9) All 1-hour average PM CPMS readings or particulate matter CEMS outputs. (40 CFR 62.14675a(m)(9))
- n. If the Permittee choose to stack test less frequently than annually, consistent with 40 CFR 62.14655a(a), the Permittee must keep annual records that document that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. (40 CFR 62.14675a(o))
- o. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 62.14675a(p))
- p. Records of all required maintenance performed on the air pollution control and monitoring equipment. (40 CFR 62.14675a(q))
- q. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 62.14675a(r))
- r. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the Permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the Permittee combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the Permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the Permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, the Permittee must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a). (40 CFR 62.14675a(s))



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K. <u>Recordkeeping and Reporting</u> (continued)

 Where and in what format must the Permittee keep records? All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator. (40 CFR 62.14680a)

- 3. What reports must the Permittee submit? (40 CFR 62.14685a)
 - a. Waste Management Plan is due date is no later than 30 days after the date of publication in the Federal Registrar or the date the Permittee recommence burning solid waste, whichever is later. (40 CFR 6214690a, 62.14685a Table 3)
 - b. Initial Test Report is due no later than 60 days following the initial performance test. The contents of the report shall include the following: (40 CFR 62.14695a, 62.14685a Table 3)
 - (1) Complete test report for the initial performance test.
 - (2) The values for the site-specific operating limits.
 - (3) Installation of bag leak detection systems for fabric filters.
 - c. Annual report is due no later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report. The contents of the report shall include the following: (40 CFR 62.14700a, 62.14705a, 62.14685a Table 3)
 - (1) Name and address.
 - (2) State and signature by responsible official.
 - (3) Date of report.
 - (4) Values for the operating limits.
 - (5) Highest recorded 3-hour average and the lowest 3-hour average, as applicable, (or 30-day average, if applicable) for each operating parameter recorded for the calendar year being reported.
 - (6) If a performance test was conducted during the reporting period, the results of the test.
 - (7) If a performance test was not conducted during the reporting period, a statement that the requirements of 40 CFR 62.1468055a(a) were met.
 - (8) Documentation of periods when all qualified CISWI operators were unavailable for more than 8 hours but less than 2 weeks
 - (9) If the Permittee is conducting performance tests once every 3 years consistent with 40 CFR 62.1468055a(a), the date of the last 2 performance tests, a comparison of the emission level achieved in the last 2 performance tests to the 75 percent emission limit threshold required in 40 CFR 62.1468055a(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.
 - (10) Any malfunction, deviation, or continuous monitoring system out of control periods information as specified in 40 CFR 62.14705a(k) through (o).
 - d. Emission Limitation or Operating Limit Deviation Report is due by August 1 of that year for data collected during the first half of the calendar year and by February 1 of the following year for data collected during the second half of the calendar year. The contents of the report shall include the following: (40 CFR 62.14710a, 62.14715a, 62.14685a Table 3)
 - (1) Date and times of deviations.
 - (2) Averaged and recorded data for these dates.
 - (3) Duration and causes for each deviation and the corrective actions taken.
 - (4) Copy of the operating limit monitoring data and any test reports.
 - (5) Dates, times, and causes for monitor downtime incidents.



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K. <u>Recordkeeping and Reporting</u> (continued)

- 3. What reports must the Permittee submit? (40 CFR 62.14685a) (continued)
 - e. Qualified Operator Deviation Notification is due within 10 days of deviation. The contents of the report shall include the following: (40 CFR 62.14720a(a)(1), 62.14685a Table 3)
 - (1) State of cause of deviation.
 - (2) Description of efforts to have an accessible qualified operator.
 - (3) The date a qualified operator will be accessible.
 - f. Qualified Operator Deviation Status Report is due every 4 weeks following deviation. The contents of the report shall include: (40 CFR 62.14720a(a)(2)), 62.14685a Table 3)
 - (1) Description of efforts to have an accessible qualified operator.
 - (2) The date a qualified operator will be accessible.
 - (3) Request for approval to continue operation.
 - g. Qualified Operator Deviation Notification of Resumed Operation is due prior to resuming operation. The contents of the report shall include notification that the Permittee is resuming operation. (40 CFR 62.14720a(b), 62.14685a Table 3)

4. When must the Permittee submit the waste management plan? The Permittee must submit a waste management plan no later than 30 days after date of publication in the Federal Register or the date the Permittee recommence burning solid waste, whichever is later. (40 CFR 62.14690a)

5. What information must the Permittee submit following my initial performance test? The Permittee must submit the information specified in paragraphs (a) through (c) of 40 CFR 62.14695a no later than 60 days following the initial performance test. All reports must be signed by the facilities manager: (40 CFR 62.14695a)

- a. The complete test report for the initial performance test results obtained under 40 CFR 62.14625a, as applicable; (40 CFR 62.14695a(a))
- b. The values for the site-specific operating limits established in 40 CFR 62.14605a or 40 CFR 62.14610a; and (40 CFR 62.14695a(b))
- 6. When must the Permittee submit the annual report?

The Permittee must submit an annual report no later than 12 months following the submission of the information in 40 CFR 62.14695a. The Permittee must submit subsequent reports no more than 12 months following the previous report. (If the unit is subject to permitting requirements under Title V of the Clean Air Act, the Permittee may be required by the permit to submit these reports more frequently.) (40 CFR 62.14700a)



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K. <u>Recordkeeping and Reporting</u> (continued)

- 7. What information must the Permittee include in the annual report? The annual report required under 40 CFR 62.14700a must include the ten items listed in paragraphs (a) through (p) of 40 CFR 62.14705a. If the Permittee has a deviation from the operating limits or the emission limitations, the Permittee must also submit deviation reports as specified in 40 CFR 62.14710a, 62.14715a, and 62.14720a. (40 CFR 62.14705a)
 - a. Company name and address; (40 CFR 62.14705a(a))
 - b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. If the report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces this requirement; (40 CFR 62.14705a(b))
 - c. Date of report and beginning and ending dates of the reporting period. The Permittee is no longer required to provide the date of the report when the report is submitted via CEDRI; (40 CFR 62.14705a(c))
 - d. The values for the operating limits established pursuant to 40 CFR 62.14605a or 40 CFR 62.14610a; (40 CFR 62.14705a(d))
 - e. If no deviation from any emission limitation or operating limit that applies to the Permittee has been reported, a statement that there was no deviation from the emission limitations or operating limits during the reporting period; (40 CFR 62.14705a(e))
 - f. The highest recorded 3-hour average and the lowest recorded 3-hour average (30-day average for energy recovery units), as applicable, for each operating parameter recorded for the calendar year being reported; (40 CFR 62.14705a(f))
 - g. Information recorded under 40 CFR 62.14675a(b)(6) and (c) through (e) for the calendar year being reported; (40 CFR 62.14705a(g))
 - h. For each performance test conducted during the reporting period, if any performance test is conducted, the process unit(s) tested, the pollutant(s) tested and the date that such performance test was conducted. Submit, following the procedure specified in 40 CFR 62.14730a(b)(1), the performance test report no later than the date that you submit the annual report; (40 CFR 62.14705a(h))
 - i. If the Permittee met the requirements of 40 CFR 62.14655a(a), and did not conduct a performance test during the reporting period, the Permittee must state that they met the requirements of 40 CFR 62.14655a(a), and, therefore, were not required to conduct a performance test during the reporting period; (40 CFR 62.14705a(i))
 - j. The start date, start time, and duration (in hours) of periods when all qualified CISWI operators were unavailable for more than 8 hours, but less than 2 weeks; (40 CFR 62.14705a(j))
 - k. If the Permittee had a malfunction during the reporting period, the compliance report must include the start date, start time, duration (in hours), and a brief description for each malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 60.11(d), including actions taken to correct a malfunction; (40 CFR 62.14705a(k))
 - 1. For each deviation from an emission or operating limitation that occurs for a CISWI for which you are not using a CMS to comply with the emission or operating limitations in Subpart IIIa, the annual report must contain the following information: (40 CFR 62.14705a(l))
 - (1) The total operating time (in hours) of the CISWI at which the deviation occurred during the reporting period; and (40 CFR 62.14705a(l)(1))
 - (2) Information on the start date, start time, duration (in hours), and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. (40 CFR 62.14705a(l)(2))



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K. <u>Recordkeeping and Reporting</u> (continued)

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7. What information must the Permittee include in the annual report? (continued)

The annual report required under 40 CFR 62.14700a must include the ten items listed in paragraphs (a) through (p) of 40 CFR 62.14705a. If the Permittee has a deviation from the operating limits or the emission limitations, the Permittee must also submit deviation reports as specified in 40 CFR 62.14710a, 62.14715a, and 62.14720a. (40 CFR 62.14705a) (continued)

- m. If there were periods during which the continuous monitoring system, including the CEMS, was out of control as specified in paragraph (o) of 40 CFR 62.14705a, the annual report must contain the following information for each deviation from an emission or operating limitation occurring for a CISWI for which the Permittee is using a continuous monitoring system to comply with the emission and operating limitations in Subpart IIIa: (40 CFR 62.14705a(m))
 - (1) The date and time that each malfunction started and stopped; (40 CFR 62.14705a(m)(1))
 - (2) The start and end date and time and duration (in hours) that each CMS was inoperative, except for zero (low-level) and high-level checks; (40 CFR 62.14705a(m)(2))
 - (3) The start and end date and time and duration (in hours) that each continuous monitoring system was out-ofcontrol, and descriptions of corrective actions taken; (40 CFR 62.14705a(m)(3))
 - (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period; (40 CFR 62.14705a(m)(4))
 - (5) A summary of the total duration (in hours) of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period; (40 CFR 62.14705a(m)(5))
 - (6) A breakdown of the total duration (in hours) of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes; (40 CFR 62.14705a(m)(6))
 - (7) A summary of the total duration (in hours) of continuous monitoring system downtime during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total operating time of the CISWI at which the continuous monitoring system downtime occurred during that reporting period; (40 CFR 62.14705a(m)(7))
 - (8) An identification of each parameter and pollutant that was monitored at the CISWI; (40 CFR 62.14705a(m)(8))
 - (9) A brief description of the CISWI; (40 CFR 62.14705a(m)(9))
 - (10) A brief description of the continuous monitoring system; (40 CFR 62.14705a(m)(10))
 - (11) The date of the latest continuous monitoring system certification or audit; and (40 CFR 62.14705a(m)(11))
 - (12) A description of any changes in continuous monitoring system, processes, or controls since the last reporting period. (40 CFR 62.14705a(m)(12))
- n. If there were periods during which the continuous monitoring system, including the CEMS, was not out of control as specified in paragraph (o) of 40 CFR 62.14705a, a statement that there were not periods during which the continuous monitoring system was out of control during the reporting period. (40 CFR 62.14705a(n))
 - A continuous monitoring system is out of control if any of the following occur: (40 CFR 62.14705a(o))
 - (1) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard; (40 CFR 62.14705a(o)(1))
 - (2) The continuous monitoring system fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; and (40 CFR 62.14705a(o)(2))
 - (3) The continuous opacity monitoring system calibration drift exceeds two times the limit in the applicable performance specification in the relevant standard. (40 CFR 62.14705a(o)(3))



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K. <u>Recordkeeping and Reporting</u> (continued)

- What else must the Permittee report if the Permittee has a deviation from the operating limits or the emission limitations?
 - a. The Permittee must submit a deviation report if any recorded 3-hour average (30-day average for energy recovery units or for PM CPMS) parameter level is above the maximum operating limit or below the minimum operating limit established under Subpart IIIa, if the bag leak detection system alarm sounds for more than 5 percent of the operating time for any 6-month reporting period, if a performance test was conducted that deviated from any emission limitation, or if a 30-day average measured using a CEMS deviated from any emission limitation. (40 CFR 62.14710a(a))
 - b. The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data collected during the second half of the calendar year (July 1 to December 31). (40 CFR 62.14710a(b))

9. What must the Permittee include in the deviation report? In each report required under 40 CFR 62.14710a, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in Subpart IIIa, include the four items described below. (40 CFR 62.14715a)

- a. The calendar dates and times your unit deviated from the emission limitations or operating limit requirements; (40 CFR 62.14715a(a))
- b. The averaged and recorded data for those dates; (40 CFR 62.14715a(b))
- c. Duration and causes of the following: (40 CFR 62.14715a(c))
 - (1) Each deviation from the emission limitations or operating limits and your corrective actions; and (40 CFR 62.14715a(c)(1))
- d. A copy of the operating limit monitoring data during each deviation and, for any test report that documents the emission levels, the process unit(s) tested, the pollutant(s) tested and the date that the performance test was conducted. Submit, following the procedure specified in 40 CFR 62.14730a(b)(1), the performance test report no later than the date that the Permittee submit the deviation report. (40 CFR 62.14715a(d))
- 10. What else must the Permittee report if the Permittee has a deviation from the requirement to have a qualified operator accessible?
 - a. If all qualified operators are not accessible for two weeks or more, the Permittee must take the two actions below. (40 CFR 62.14720a(a))
 - (1) The Permittee must submit a notification of the deviation within 10 days that includes the three items below. (40 CFR 62.14720a(a)(1))
 - (a) A statement of what caused the deviation; (40 CFR 62.14720a(a)(1)(i))
 - (b) A description of what the Permittee is doing to ensure that a qualified operator is accessible; and (40 CFR 62.14720a(a)(1)(ii))
 - (c) The date when the Permittee anticipates that a qualified operator will be available. (40 CFR 62.14720a(a)(1)(iii))
 - (2) Submit a status report to the Administrator every 4 weeks that includes the three items below. (40 CFR 62.14720a(a)(2))
 - (a) A description of what the Permittee is doing to ensure that a qualified operator is accessible; (40 CFR 62.14720a(a)(2)(i))
 - (b) The date when the Permittee anticipates that a qualified operator will be accessible; and(40 CFR 62.14720a(a)(2)(ii))



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K. <u>Recordkeeping and Reporting</u> (continued)

- 10. What else must the Permittee report if the Permittee has a deviation from the requirement to have a qualified operator accessible? (continued)
 - a. If all qualified operators are not accessible for two weeks or more, the Permittee must take the two actions below. (40 CFR 62.14720a(a)) (continued)
 - (2) Submit a status report to the Administrator every 4 weeks that includes the three items below. (40 CFR 62.14720a(a)(2)) (continued)
 - (c) Request approval from the Administrator to continue operation of the CISWI. (40 CFR 62.14720a(a)(2)(iii))
 - b. If the unit was shut down by the Administrator, under the provisions of 40 CFR 62.14595a(b)(2), due to a failure to provide an accessible qualified operator, the Permittee must notify the Administrator that the Permittee are resuming operation once a qualified operator is accessible. (40 CFR 62.14720a(b))
- 11. Are there any other notifications or reports that the Permittee must submit?
 - a. Yes. The Permittee must submit notifications as provided by 40 CFR 60.7. (40 CFR 62.14725a(a))
 - b. If the Permittee cease combusting solid waste but continue to operate, the Permittee must provide 30 days prior notice of the effective date of the waste-to-fuel switch, consistent with 40 CFR 62.14640a(a). The notification must identify: (40 CFR 62.14725a(b))
 - (1) The name of the Permittee of the CISWI, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice; (40 CFR 62.14725a(b)(1))
 - (2) The currently applicable subcategory under Subpart IIIa, and any 40 CFR Part 63 subpart and subcategory that will be applicable after the Permittee cease combusting solid waste; (40 CFR 62.14725a(b)(2))
 - (3) The fuel(s), non-waste material(s) and solid waste(s) the CISWI is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting; (40 CFR 62.14725a(b)(3))
 - (4) The date on which the Permittee became subject to the currently applicable emission limits; and(40 CFR 62.14725a(b)(4))
 - (5) The date upon which the Permittee will cease combusting solid waste, and the date (if different) that the Permittee intend for any new requirements to become applicable (i.e., the effective date of the waste-to-fuel switch), consistent with paragraphs (b)(2) and (3) of 40 CFR 62.14725a. (40 CFR 62.14725a(b)(5))
- 12. In what form can the Permittee submit the reports?
 - a. Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates. Beginning 30 days after date of publication in the Federal Register or once the reporting form has been available in CEDRI for 1 year, whichever is later, the Permittee must submit subsequent reports on or before the submittal dates to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov). Use the appropriate electronic report in CEDRI for Subpart IIIa or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Website (https://www.epa.gov/electronic-reporting-air- emissions/compliance-and-emissions-data-reporting-interface-cedri). When the date forms become available in CEDRI will be listed on the CEDRI Website. If the reporting form specific to Subpart IIIa is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in 40 CFR 60.4. Once the form has been available in CEDRI for 90 calendar days, the Permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in Subpart IIIa, regardless of the method in which the report is submitted. (40 CFR 62.14730a(a))



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K. <u>Recordkeeping and Reporting</u> (continued)

- 12. In what form can the Permittee submit the reports? (continued)
 - b. Submit results of each performance test and CEMS performance evaluation required by Subpart IIIa as follows: (40 CFR 62.14730a(b))
 - (1) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) required by Subpart IIIa, the Permittee must submit the results of the performance test following the procedure specified in either paragraph below: (40 CFR 62.14730a(b)(1))
 - For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed (a) on the EPA's ERT Website (https://www.epa.gov/electronic-reporting-air- emissions/electronicreporting-tool-ert) at the time of the test, the Permittee must submit the results of the performance test to the EPA via the CEDRI. CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the XML schema listed on the EPA's ERT Website. If the Permittee claim that some of the performance test information being submitted is confidential business information (CBI), the Permittee must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph; and (40 CFR 62.14730a(b)(1)(i))
 - (b) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Website at the time of the test, the Permittee must submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4. (40 CFR 62.14730a(b)(1)(ii))
 - (2) Within 60 days after the date of completing each CEMS performance evaluation the Permittee must submit the results of the performance evaluation following the procedure specified in either paragraph (b)(2) (i) or (b)(2) (ii) of 40 CFR 62.14730a. In the situation where performance evaluations cover multiple days, the results may be submitted together up to 60 days after all performance evaluations are completed. (40 CFR 62.14730a(b)(2))
 - (a) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT Website at the time of the evaluation, the Permittee must submit the results of the performance evaluation to the EPA via the CEDRI. CEDRI can be accessed through the EPA's CDX. Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT Website. If the Permittee must submit a complete file generated through the use of the EPA's ERT or an alternate file format consistent with the xML schema listed on the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph; and (40 CFR 62.14730a(b)(2)(i))



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Issued to: NEVADA CEMENT COMPANY (As PERMITTEE)

Section VI. <u>Federal Plan Requirements – 40 CFR Part 62 Subpart IIIa – Commercial and</u> <u>Industrial Solid Waste Incineration Units That Commenced Construction on or</u> <u>Before June 4, 2010 and Have Not Been Modified or Reconstructed Since August</u> <u>7, 2013</u> (continued)

K. <u>Recordkeeping and Reporting</u> (continued)

- 12. In what form can I submit my reports? (continued)
 - b. Submit results of each performance test and CEMS performance evaluation required by Subpart IIIa as follows: (40 CFR 62.14730a(b)) (continued)
 - (2) (continued)
 - (b) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT Website at the time of the evaluation, the Permittee must submit the results of the performance evaluation to the Administrator at the appropriate address listed in 40 CFR 60.4. (40 CFR 62.14730a(b)(2)(ii))
 - c. If the Permittee is required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, the Permittee will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, the Permittee may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. The Permittee must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. The Permittee must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting requirement at the time of the notification, the date reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. (40 CFR 62.14730a(c))
 - d. If the Permittee is required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the Permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the Permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). If the Permittee intend to assert a claim of force majeure, the Permittee must submit notification to the Administrator in writing as soon as possible following the date the Permittee first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. The Permittee must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which the Permittee propose to report, or if the Permittee have already met the reporting requirement at the time of the notification, the date reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. (40 CFR 62.14730a(d))



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Section VI. <u>Federal Plan Requirements – 40 CFR Part 62 Subpart IIIa – Commercial and</u> <u>Industrial Solid Waste Incineration Units That Commenced Construction on or</u> <u>Before June 4, 2010 and Have Not Been Modified or Reconstructed Since August</u> <u>7, 2013</u> (continued)

K. <u>Recordkeeping and Reporting</u> (continued)

- 13. Can reporting dates be changed?If the Administrator agrees, the Permittee may change the semiannual or annual reporting dates. See 40 CFR 60.19(c) for procedures to seek approval to change the reporting date. (40 CFR 62.14735a)
- L. <u>Delegation of Authority</u>

What authorities are withheld by the EPA Administrator?

The following authorities are withheld by the EPA Administrator and not transferred to the state or tribe: (40 CFR 62.14775a)

- a. Approval of alternatives to the emission limitations in Table 6 to Subpart IIIa and operating limits established under 40 CFR 62.14605a and Table 1 to Subpart IIIa. (40 CFR 62.14775a(a))
- b. Approval of petitions submitted pursuant to the requirements of 40 CFR 62.14610a establishing operating parameters when using controls other than a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, or a dry scrubber to comply with the emission limitations in Table 6 to Subpart IIIa. (40 CFR 62.14775a(b))
- c. Approval of major alternatives to test methods established under 40 CFR 62.14615a and Tables 4 through 7 to Subpart IIIa. (40 CFR 62.14775a(c))
- d. Approval of major alternatives to monitoring requirements established under 40 CFR 62.14665a, 40 CFR 62.14575a and Table 1 to Subpart IIIa. (40 CFR 62.14775a(d))
- e. Approval of major alternatives to recordkeeping and reporting requirements of Subpart IIIa. (40 CFR 62.14775a(e))
- f. Approval of an alternative to any electronic reporting to the EPA required by Subpart IIIa. (40 CFR 62.14775a(f))
- g. Approval of requests submitted pursuant to the requirements in 40 CFR 62.14595a(b)(2). (40 CFR 62.14775a(g))
- h. Approval of alternative opacity emission limits in 40 CFR 62.14600a under 40 CFR 60.11(e)(6)through (e)(8). (40 CFR 62.14775a(h))
- i. Performance test and data reduction waivers under 40 CFR 62.14615a(j), 60.8(b)(4) and(5). (40 CFR 62.14775a(i))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

- A. <u>40 CFR Part 60 Appendix B and Appendix F SO₂ and NOx Continuous Emissions Monitoring System (CEMS) Requirements for</u> Systems 09 and 15 (NAC 445B.3405)
 - 1. On or before the date of start-up of **Systems 09 and 15, each**, the Permittee shall install, calibrate, operate, and maintain an SO_2 and NO_X CEMS in the exhaust stacks of **Systems 09 and 15, each**. The CEMS sampling probe must be installed at an appropriate location in the exhaust stacks to accurately and continuously measure the concentration of SO_2 and NO_X (in pounds per hour from **Systems 09 and 15, each**, in accordance with the requirements prescribed in Nevada Administrative Code (NAC) 445B.252 to NAC 445B.267, applicable subparts 40 CFR Part 60 Appendix B and Appendix F. Verification of the operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the devices.
 - 2. The Permittee shall comply with the following method performance specifications (40 CFR Part 60 Appendix B PS-2 Section 13.0):
 - a. Calibration Drift
 - b. Relative Accuracy
 - 3. The Permittee shall develop and implement a Quality Control (QC) program. As a minimum, each QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities (40 CFR Part 60 Appendix F Procedure 1 Section 3.0):
 - a. Calibration of CEMS
 - b. Calibration maintenance of CEMS (including spare parts inventory)
 - c. Preventative maintenance of CEMS (including spare parts inventory)
 - d. Data recording, calculations, and reporting
 - e. Accuracy audit procedures including sampling and analysis methods
 - f. Program of corrective action for malfunctioning CEMS
 - 4. The written procedures under **VII.A.3.** of this section, must be kept on record and available for inspection by the Director. (40 CFR Part 60 Appendix F Procedure 1 Section 3.0)
 - 5. The Permittee shall conduct a Calibration Drift Assessment according to 40 CFR Part 60 Appendix F Procedure 1 Sections 4.1 and 4.2. (40 CFR Part 60 Appendix F Procedure 1 Sections 4.1 and 4.2).
 - 6. The Permittee shall record and report all CEMS data according to 40 CFR Part 60 Appendix F Procedure 1 Section 4.4. All measurements from the CEMS must be retained on file by the Permittee for at least 2 years. (40 CFR Part 60 Appendix F Procedure 1 Section 4.4)
 - 7. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows (40 CFR Part 60 Appendix F Procedure 1 Section 5.1):
 - a. The Relative Accuracy Test (RATA) shall be conducted once every four calendar quarters. (40 CFR Part 60 Appendix F Procedure 1 Section 5.1.1)
 - b. The Cylinder Gas Audit (CGA) shall be conducted every quarter except when a RATA is conducted. (40 CFR Part 60 Appendix F Procedure 1 Section 5.1.2)



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- A. <u>40 CFR Part 60 Appendix B and Appendix F SO₂ and NOx Continuous Emissions Monitoring System (CEMS) Requirements for</u> Systems 09 and 15 (NAC 445B.3405) (continued)
 - 8. Unless specified otherwise in the applicable subpart, the Permittee shall comply with the relative accuracy criteria: a. For RATA (40 CFR Part 60 Appendix F Procedure 1 Section 5.2.3(1)):
 - (1) For SO₂ and NO_X, RA shall be less than or equal to 20% (if the value determined by the Reference Method (RM) is greater than 50% of the emission limit) or RA shall be less than or equal to 10% (if the value determined by the RM is less than 50% of the emission limit). (40 CFR Part 60 Appendix B PS-2 Section 13.2)
 - b. For CGA ±15 percent of the average audit value for ±5 ppm, whichever is greater. (40 CFR Part 60 Appendix F Procedure 1 Section 5.2.3(2))
 - 9. The Permittee shall conduct and report to the Director a quarterly audit as specified under 40 CFR Part 60 Appendix F Procedure 1 Section 7.0. (40 CFR Part 60 Appendix F Procedure 1 Section 7.0)
 - 10. Monitoring systems: Records; Reports (NAC 445B.265)
 - a. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.
 - b. The Permittee required to install a continuous monitoring system shall submit a written report of excess emissions to the director for every calendar quarter. All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter and must include the following information:
 - (1) The magnitude of excess emissions computed in accordance with NAC 445B.256 to 445B.267, inclusive, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - (2) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the affected facility.
 - (3) The nature and cause of any malfunction, if known, the corrective action taken or preventative measures adopted.
 - (4) Specific identification of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of any repairs or adjustments that were made.
 - (a) When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be included in the report.
 - c. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain a file of all measurements, including:
 - (1) Continuous monitoring systems, monitoring devices and performance testing measurements;
 - (2) All continuous monitoring system performance evaluations;
 - (3) All continuous monitoring systems or monitoring device calibration checks;
 - (4) Adjustments and maintenance performed on these systems or devices; and
 - (5) All other information required by NAC 445B.256 to 445B.267, inclusive, recorded in a permanent form suitable for inspection.
 - (a) The file shall be retained for at least 2 years following the date of the measurements, maintenance, reports and records.



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- B. <u>40 CFR Part 60 Appendix B and Appendix F CO Continuous Emissions Monitoring System (CEMS) Requirements for Systems</u> <u>09 and 15</u> (NAC 445B.3405)
 - 1. On or before the date of start-up of **System 09 and 15, each**, the Permittee shall install, calibrate, operate, and maintain a CO CEMS in the exhaust stacks o **System 09 and 15, each**. The CEMS sampling probe must be installed at an appropriate location in the exhaust stacks to accurately and continuously measure the concentration of CO (in pounds per hour) fro **System 09 and 15, each**, in accordance with the requirements prescribed in Nevada Administrative Code (NAC) 445B.252 to NAC 445B.267, applicable subparts 40 CFR Part 60 Appendix B and Appendix F. Verification of the operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the devices.
 - 2. The Permittee shall perform procedures for the following (40 CFR Part 60 Appendix B PS-4A Sections 8.3 through 8.4):
 - a. Response Time Test
 - b. Interference Check
 - 3. The Permittee shall comply with the following method performance specifications (40 CFR Part 60 Appendix B PS-4A Section 13.0):
 - a. Calibration Drift
 - b. Relative Accuracy
 - c. Response Time
 - 4. The Permittee may perform alternative procedures as specified under 40 CFR Part 60 Appendix B PS-4A Section 16.0. (40 CFR Part 60 Appendix B PS-4A Section 16.0)
 - 5. The Permittee shall develop and implement a Quality Control (QC) program. As a minimum, each QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities (40 CFR Part 60 Appendix F Procedure 1 Section 3.0):
 - a. Calibration of CEMS
 - b. Calibration maintenance of CEMS (including spare parts inventory)
 - c. Preventative maintenance of CEMS (including spare parts inventory)
 - d. Data recording, calculations, and reporting
 - e. Accuracy audit procedures including sampling and analysis methods
 - f. Program of corrective action for malfunctioning CEMS
 - 6. The written procedures under **VII.B.5.** of this section, must be kept on record and available for inspection by the Director. (40 CFR Part 60 Appendix F Procedure 1 Section 3.0)
 - 7. The Permittee shall conduct a Calibration Drift Assessment according to 40 CFR Part 60 Appendix F Procedure 1 Sections 4.1 and 4.2. (40 CFR Part 60 Appendix F Procedure 1 Sections 4.1 and 4.2).
 - 8. The Permittee shall record and report all CEMS data according to 40 CFR Part 60 Appendix F Procedure 1 Section 4.4. All measurements from the CEMS must be retained on file by the Permittee for at least 2 years. (40 CFR Part 60 Appendix F Procedure 1 Section 4.4)



a.

Nevada Department of Conservation and Natural Resources • Division of Environmental Protection Bureau of Air Pollution Control

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- B. <u>40 CFR Part 60 Appendix B and Appendix F CO Continuous Emissions Monitoring System (CEMS) Requirements for Systems</u> <u>09 and 15</u> (NAC 445B.3405) (continued)
 - 9. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows (40 CFR Part 60 Appendix F Procedure 1 Section 5.1):
 - a. The Relative Accuracy Test (RATA) shall be conducted once every four calendar quarters. (40 CFR Part 60 Appendix F Procedure 1 Section 5.1.1)
 - b. The Cylinder Gas Audit (CGA) shall be conducted every quarter except when a RATA is conducted. (40 CFR Part 60 Appendix F Procedure 1 Section 5.1.2)
 - 10. Unless specified otherwise in the applicable subpart, the Permittee shall comply with the relative accuracy criteria:
 - For RATA (40 CFR Part 60 Appendix F Procedure 1 Section 5.2.3(1)):
 - (1) For CO emissions, RA shall be less than or equal to 10% (if the value determined by the Reference Method (RM) is greater than 50% of the emission limit) or RA shall be less than or equal to 5% (if the value determined by the RM is less than 50% of the emission limit). (40 CFR Part 60 Appendix B PS-4 Section 13.2)
 - b. For CGA ±15 percent of the average audit value for ±5 ppm, whichever is greater. (40 CFR Part 60 Appendix F Procedure 1 Section 5.2.3(2))
 - 11. The Permittee shall conduct and report to the Director a quarterly audit as specified under 40 CFR Part 60 Appendix F Procedure 1 Section 7.0. (40 CFR Part 60 Appendix F Procedure 1 Section 7.0)
 - 12. <u>Monitoring systems: Records; Reports</u> (NAC 445B.265)
 - a. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.
 - b. The Permittee required to install a continuous monitoring system shall submit a written report of excess emissions to the director for every calendar quarter. All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter and must include the following information:
 - (1) The magnitude of excess emissions computed in accordance with NAC 445B.256 to 445B.267, inclusive, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - (2) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the affected facility.
 - (3) The nature and cause of any malfunction, if known, the corrective action taken or preventative measures adopted.
 - (4) Specific identification of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of any repairs or adjustments that were made.
 - (a) When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be included in the report.
 - c. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain a file of all measurements, including:
 - (1) Continuous monitoring systems, monitoring devices and performance testing measurements;
 - (2) All continuous monitoring system performance evaluations;
 - (3) All continuous monitoring systems or monitoring device calibration checks;
 - (4) Adjustments and maintenance performed on these systems or devices; and
 - (5) All other information required by NAC 445B.256 to 445B.267, inclusive, recorded in a permanent form suitable for inspection.
 - (a) The file shall be retained for at least 2 years following the date of the measurements, maintenance, reports and records.



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- C. <u>40 CFR Part 60 Appendix B and Appendix F HCl Continuous Emissions Monitoring System (CEMS) Requirements for Systems</u> <u>09 and 15</u> (NAC 445B.3405)
 - 1. On or before the date of start-up of **Systems 09 and 15, each**, the Permittee shall install, calibrate, operate, and maintain a HCl CEMS in the exhaust stacks of **Systems 09 and 15, each**. The CEMS sampling probe must be installed at an appropriate location in the exhaust stacks to accurately and continuously measure the concentration of HCl (in ppmv) from **Systems 09 and 15, each**, in accordance with the requirements prescribed in Nevada Administrative Code (NAC) 445B.252 to NAC 445B.267, applicable subparts 40 CFR Part 60 Appendix B and Appendix F. Verification of the operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the devices.
 - 2. The Permittee shall comply with the following performance specification test procedures (40 CFR Part 60 Appendix B PS-18 Section 11.0):
 - a. Interference Test;
 - b. Beam Intensity Test (IP-CEMS only)
 - c. Temperature Verification Procedure (IP-CEMS only)
 - d. Pressure Verification Procedure (IP-CEMS only)
 - e. Level of Detection Determination
 - f. Response Time Test
 - g. Measurement Error Test
 - h. Calibration Drift Test
 - i. Relative Accuracy Test
 - 3. The Permittee shall develop and implement a Quality Control (QC) program. As a minimum, each QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities (40 CFR Part 60 Appendix F Procedure 1 Section 3.0):
 - a. Calibration of CEMS
 - b. Calibration maintenance of CEMS (including spare parts inventory)
 - c. Preventative maintenance of CEMS (including spare parts inventory)
 - d. Data recording, calculations, and reporting
 - e. Accuracy audit procedures including sampling and analysis methods
 - f. Program of corrective action for malfunctioning CEMS
 - 4. The written procedures under **VII.D.3.** of this section, must be kept on record and available for inspection by the Director. (40 CFR Part 60 Appendix F Procedure 1 Section 3.0)
 - 5. The Permittee shall conduct a Calibration Drift Assessment according to 40 CFR Part 60 Appendix F Procedure 1 Sections 4.1 and 4.2. (40 CFR Part 60 Appendix F Procedure 1 Sections 4.1 and 4.2).
 - 6. The Permittee shall record and report all CEMS data according to 40 CFR Part 60 Appendix F Procedure 1 Section 4.4. All measurements from the CEMS must be retained on file by the Permittee for at least 2 years. (40 CFR Part 60 Appendix F Procedure 1 Section 4.4)
 - 7. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows (40 CFR Part 60 Appendix F Procedure 1 Section 5.1):
 - a. The Relative Accuracy Test (RATA) shall be conducted once every four calendar quarters. (40 CFR Part 60 Appendix F Procedure 1 Section 5.1.1)
 - b. The Cylinder Gas Audit (CGA) shall be conducted every quarter except when a RATA is conducted. (40 CFR Part 60 Appendix F Procedure 1 Section 5.1.2)



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Section VII. Continuous Emissions Monitoring System (CEMS) Conditions (continued)

- D. <u>40 CFR Part 60 Appendix B and Appendix F HCl Continuous Emissions Monitoring System (CEMS) Requirements for Systems</u> <u>09 and 15</u> (NAC 445B.3405) (continued)
 - 8. The Permittee shall replace the Relative Accuracy Test Audit requirements in Procedure 1 of Appendix F with the validation requirements and criteria of Sections 11.1.1 and 12 of PS-15 as specified in 40 CFR 60.2710 of Subpart IIIa. (40 CFR 60.2710(j)(1))
 - 9. The Permittee shall conduct and report to the Director a quarterly audit as specified under 40 CFR Part 60 Appendix F Procedure 1 Section 7.0. (40 CFR Part 60 Appendix F Procedure 1 Section 7.0)
 - 10. Monitoring systems: Records; Reports (NAC 445B.265)
 - a. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.
 - b. The Permittee required to install a continuous monitoring system shall submit a written report of excess emissions to the director for every calendar quarter. All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter and must include the following information:
 - (1) The magnitude of excess emissions computed in accordance with NAC 445B.256 to 445B.267, inclusive, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - (2) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the affected facility.
 - (3) The nature and cause of any malfunction, if known, the corrective action taken or preventative measures adopted.
 - (4) Specific identification of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of any repairs or adjustments that were made.
 - (a) When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be included in the report.
 - c. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain a file of all measurements, including:
 - (1) Continuous monitoring systems, monitoring devices and performance testing measurements;
 - (2) All continuous monitoring system performance evaluations;
 - (3) All continuous monitoring systems or monitoring device calibration checks;
 - (4) Adjustments and maintenance performed on these systems or devices; and
 - (5) All other information required by NAC 445B.256 to 445B.267, inclusive, recorded in a permanent form suitable for inspection.
 - (a) The file shall be retained for at least 2 years following the date of the measurements, maintenance, reports and records.

****End of Continuous Emissions Monitoring System (CEMS) Conditions****



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Section VIII. Continuous Opacity Monitoring System (COMS) Conditions

A. NAC 445B.265

Monitoring systems: Records; Reports

- 1. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.
- 2. The Permittee required to install a continuous monitoring system shall submit a written report of excess emissions to the director for every calendar quarter. All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter and must include the following information:
 - a. The magnitude of excess emissions computed in accordance with NAC 445B.256 to 445B.267, inclusive, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - b. Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the affected facility.
 - c. The nature and cause of any malfunction, if known, the corrective action taken or preventative measures adopted.
 - d. Specific identification of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of any repairs or adjustments that were made.
 - (1) When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be included in the report.
- 3. The Permittee subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain a file of all measurements, including:
 - a. Continuous monitoring systems, monitoring devices and performance testing measurements;
 - b. All continuous monitoring system performance evaluations;
 - c. All continuous monitoring systems or monitoring device calibration checks;
 - d. Adjustments and maintenance performed on these systems or devices; and
 - e. All other information required by NAC 445B.256 to 445B.267, inclusive, recorded in a permanent form suitable for inspection.
 - (1) The file shall be retained for at least 2 years following the date of the measurements, maintenance, reports and records.

****End of Continuous Opacity Monitoring System (COMS) Conditions****



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section IX. <u>Prevention of Significant Deterioration (PSD) – 40 CFR 52.21</u>

A. Source Obligation for Systems 09B, 15B, 34A through 34F, and 37 – 40 CFR 52.21(r)

The provisions of 40 CFR 52.21(r)(6) apply with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of paragraph (r)(6)(vi) of 40 CFR 52.21, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the Permittee elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) of 40 CFR 52.21 for calculating projected actual emissions. (40 CFR 52.21(r)(6))

- a. Before beginning actual construction of the project, the Permittee shall document and maintain a record of the following information: (40 CFR 52.21(r)(6)(i)(a) through (c))
 - (1) A description of the project;
 - (2) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) of 40 CFR 52.21(r)(6) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- b. The Permittee shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(i)(b) of 40 CFR 52.21(r)(6); and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit. (40 CFR 52.21(r)(6)(iii))
- c. If the unit is an existing unit other than an electric utility steam generating unit, the Permittee shall submit a report to the Administrator if the annual emissions, in tons per year, from the project identified in paragraph (r)(6)(i) of 40 CFR 52.21, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (r)(6)(i)(c) of 40 CFR 52.21), by a significant amount (as defined in paragraph (b)(23) of 40 CFR 52.21) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (r)(6)(i)(c) of 40 CFR 52.21. Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following: (40 CFR 52.21(r)(6)(v)(a) through (c))
 - (1) The name, address and telephone number of the major stationary source;
 - (2) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of 40 CFR 52.21; and
 - (3) Any other information that the Permittee wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- d. A "reasonable possibility" under paragraph (r)(6) of 40 CFR 52.21 occurs when the Permittee calculates the project to result in either: (40 CFR 52.21(r)(6)(vi))
 - (1) A projected actual emissions increase of at least 50 percent of the amount that is a "significant emissions increase," as defined under paragraph (b)(40) of 40 CFR 52.21 (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. (40 CFR 52.21(r)(6)(vi)(a))
- e. The Permittee shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of 40 CFR 52.21 available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii) of Chapter 52. (40 CFR 52.21(r)(7))



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section X. <u>United States EPA Consent Decree 3:17-cv-00302-MMD-WGC</u>

- A. <u>NO_x Control Technology, Emission Limits and Monitoring Requirements</u>
 - 1. NO_x Control Technology and Emission Limits
 - a. The Permittee shall install and continuously operate selective non-catalytic reduction (SNCR) control technology for Kiln #1 and Kiln #2 to reduce NO_x emissions in accordance with the timeframes and requirements set forth in Section III of Appendix A of the Consent Decree. (Consent Decree Section V.A.11)
 - b. The Permittee shall comply with all terms and conditions, including drafting submittals and complying with protocols set forth in Appendix A, to establish 30-day rolling average emission limits for NO_x applicable to each kiln. (Consent Decree Section V.A.12)
 - c. Within 30 Days after approval, conditional approval, or partial approval by U.S. EPA pursuant to Section XI (Review and Approval of Submittals) of any final 30-Day Rolling Average Emission Limit for NO_x established pursuant to Appendix A, the Permittee shall achieve and maintain continuous compliance with such 30-day rolling average emission limit for NO_x . If the 30-day rolling average emission limit for NO_x is challenged pursuant to the Dispute Resolution provisions of Section XV (Dispute Resolution), the final NO_x limit shall be the 30-day rolling average agreed to by the parties at the conclusion of Informal Dispute Resolution. If Informal Dispute Resolution does not resolve the dispute, the Permittee shall comply with its proposed final NO_x emissions limit until a final NO_x emissions limit is determined by the court. (Consent Decree Section V.A.13)
 - d. If the final 30-day rolling average emission limit for NO_x as determined in Appendix A.IV.7.d is less than a 40% reduction in baseline NO_x emissions of the applicable kiln, the United States may demand the Permittee install a Low NO_x Burner on a kiln. The United States will make this demand within 180 days of receipt of the Demonstration Report. (Consent Decree Section V.A.14)
 - e. If the United States demands that the Permittee install a Low NO_x Burner on a kiln pursuant to Paragraph 14, the Permittee shall install a Low NO_x Burner within 24 months of such demand and comply with Appendix A, Section V of this Consent Decree. Following the installation of a Low NO_x Burner on a kiln, the Permittee shall commence complying with the terms of Appendix A, Section V to establish a new 30-day rolling average emissions limit applicable to such kiln while operating Low NO_x Burner and SNCR. (Consent Decree Section V.A.15)
 - f. Upon submittal to EPA as part of a SNCR Demonstration Report of a proposed 30-day rolling average emission limit for NOx for a particular kiln pursuant to Appendix A, the Permittee shall meet the proposed limit for that kiln until such time as final 30-Day Rolling Average Limit is established pursuant to Paragraph 13. (Consent Decree Section V.A.16)
 - 2. NO_x and Ammonia Continuous Monitoring Systems

a.

- By no later than December 31, 2017, the Permittee shall install and make operational a NO_x CEMS and an Ammonia CEMS at the stack of Kiln #2 in accordance with the requirements of Appendix A. (Consent Decree Section V.B.17)
 - (1) On or before the date that a NO_x CEMS and an Ammonia CEMS is required pursuant to Paragraph 17, the Permittee shall begin to record, on a continuous basis, the daily clinker production rates by continuously meeting the requirements of 40 CFR 63.1350(d) to determine hourly clinker production rates. (Consent Decree Section V.B.17.a)
- b. Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS required pursuant to Paragraphs 17 and 19 of the Consent Decree shall be operated at all times during kiln operation. Such CEMS shall be used to demonstrate compliance with the 30-day rolling average emission limit for NO_x established in Section V.A of the Consent Decree (NOx Control Technology and Emission Limits) and Appendix A of this Consent Decree. (Consent Decree Section V.B.18)
- c. By February 1, 2018, the Permittee shall complete installation of a single stack for Kiln #1, install and make operational a NO_x CEMS and an Ammonia CEMS at the stack and start collecting the same production data as Paragraph 17.a. of this Consent Decree. (Consent Decree Section V.B.19)



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section X. <u>United States EPA Consent Decree 3:17-cv-00302-MMD-WGC</u> (continued)

- A. <u>NO_x Control Technology, Emission Limits and Monitoring Requirements</u> (continued)
 - 2. NO_x and Ammonia Continuous Monitoring Systems (continued)
 - d. Each NO_x CEMS required by this Consent Decree along with associated flow monitors and weight meters shall monitor and record the applicable NO_x emission rate from each kiln stack in units of lbs. of NO_x per ton of clinker produced at the kiln and shall be installed, certified, calibrated, maintained, and operated in accordance with the requirements of 40 CFR Part 60, Appendices B and F. The Ammonia CEMS shall be installed and operated in a manner that meets the requirements of 40 CFR Part 60, Appendices B and F, and CTM 027. (Consent Decree Section V.B.20)
 - e. For purposes of this Consent Decree, all emissions of NOx from the kilns shall be measured by the NOx CEMS. During any time when CEMS are inoperable and otherwise not measuring emission of NO_x from either Kiln, the Permittee shall apply the missing data substitution procedures in 40 CFR. Part 75, Subpart D. (Consent Decree Section V.B.21)

B. <u>SO₂ Emission Limits and Monitoring Requirements</u>

- 1. SO₂ Emission Limits
 - a. By the dates set forth below in Paragraphs 23 and 24 of this Consent Decree, the Permittee shall achieve and maintain continuous compliance with the 30-day rolling average emission limit for SO₂ set forth in Table 1: (Consent Decree Section VI.A.22)

Kiln	30-Day Rolling Average Limit for SO ₂ (lbs SO ₂ /tons of clinker)
Kiln #1	1.1
Kiln #2	1.1

Table 1: 30-Day Rolling Average Emission Limit for SO₂

- 2. SO₂ Continuous Emission Monitoring Systems
 - a. By no later than December 31, 2017, the Permittee shall install and make operational an SO₂ CEMS at the stack of Kiln #2. (Consent Decree Section VI.B.23)
 - b. No later than February 1, 2018, the Permittee shall install and make operational an SO₂ CEMS at the stack of Kiln #1. (Consent Decree Section VI.B.24)
 - c. Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the SO₂ CEMS required pursuant to Paragraphs 23 and 24 of this Consent Decree shall be operated at all times during kiln operation. Each such SO₂ CEMS shall be used at each kiln to demonstrate compliance with the 30-day rolling average emission limit for SO₂ established in Section VI.A (SO₂ Emission Limits) of this Consent Decree. (Consent Decree Section VI.B.25)
 - d. Each SO₂ CEMS required for this Consent Decree, along with associated flow monitor and weight meters, shall monitor and record the applicable SO₂ emission rate from each kiln stack in units of lb of SO₂ per ton of clinker produced at each kiln and shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR. Part 60. (Consent Decree Section VI.B.26)
 - e. For purposes of this Consent Decree, all emissions of SO₂ from the kilns shall be measured by SO₂ CEMS. During any time when the CEMS are inoperable and otherwise not measuring emissions of SO₂ from any kiln, the Permittee shall apply the missing data substitution procedures in 40 CFR. Part 75 Subpart D. (Consent Decree Section VI.B.27)

C. <u>Good Pollution Control Practices</u>

At all times, the Permittee shall maintain and operate the kilns, including all associated air pollution control equipment, in a manner consistent with good air pollution control practice. (Consent Decree Section VII.28)



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section X. <u>United States EPA Consent Decree 3:17-cv-00302-MMD-WGC</u> (continued)

D. <u>Temporary Cessation of Kiln Operation</u>

- 1. If the Permittee has temporarily ceased kiln operation of any kiln on the date by which defendant is required to install and/or continuously operate any control technology at that kiln under Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements), or Section VI (SO₂ Emission Limits and Monitoring Requirements) of this Consent Decree, the Permittee shall provide written notice to U.S. EPA within ten (10) Days after such temporary cessation began, specifying the date on which such period of temporary cessation began. The Permittee shall provide such written notice pursuant to Section XIX (Notices) of this Consent Decree. (Consent Decree Section VIII.35)
- 2. If the Permittee has provided the written notice as required in Paragraph 35 of this Consent Decree, the Permittee shall not be required to install and continuously operate the control technology at that kiln by the dates required in Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements) and Section VI (SO₂ Emission Limits and Monitoring Requirements) of this Consent Decree with respect to that kiln. However, the Permittee shall not recommence kiln operation after the dates required in Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree with respect to that kiln. However, the Permittee shall not recommence kiln operation after the dates required by this Consent Decree for that kiln; 2) commenced continuous operation of the control technologies required by this Consent Decree for that kiln; 2) commenced compliance with all requirements for that kiln contained in Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements) and Section VI (SO₂ Emission Limits and Monitoring Requirements); and 3) provided written notice to U.S. EPA within 30 days after recommencing kiln operation. If the Permittee recommences kiln operation without installing and commencing continuous operation of the control technology required under this Consent Decree and does not demonstrate compliance with all requirements) and Section VI (SO₂ Emission Limits and Monitoring Requirements), the Permittee shall be liable for stipulated penalties pursuant to Section XIII (Stipulated Penalties) of this Consent Decree. (Consent Decree Section VIII.36)
- E. Prohibition on Netting Credits or Offsets from Required Controls
 - 1. Except as specifically stated to the contrary in this Consent Decree, NOx and SO2 emission reductions resulting from compliance with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Nonattainment NSR and PSD programs. (Consent Decree Section IX.37)
 - 2. The limitations on the generation and use of netting credits or offsets set forth in Paragraph 37 of this Consent Decree do not apply to emission reductions achieved by the Permittee that are surplus to those required under this Consent Decree ("surplus emission reductions"). For purposes of this Paragraph, surplus emission reductions are the reductions over and above those required under this Consent Decree, including any final 30-day rolling average emission limit for NOx established pursuant to Appendix A, that result from the Permittee's compliance with federally enforceable emissions limits that are more stringent than limits imposed under this Consent Decree or from the Permittee's compliance with emissions limits otherwise required under applicable provisions of the Clean Air Act or with an applicable SIP that contains more stringent limits than those imposed under this Consent Decree. (Consent Decree Section IX.38)
 - 3. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by U.S. EPA or a State as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to 110 of the Act, 42 USC 7410, or in determining impacts on NAAQS, PSD increments, or air quality-related values, or for demonstrating reasonable progress under the regional haze program of the Clean Air Act pursuant to 42 USC 7491-92. (Consent Decree Section IX.39)



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Section X. <u>United States EPA Consent Decree 3:17-cv-00302-MMD-WGC</u> (continued)

F. Permits

- 1. Where any compliance obligation under this Consent Decree requires the Permittee to obtain a federal, State, or local permit or approval, the Permittee shall submit a timely and complete application for such permit or approval and take all other actions necessary to obtain all such permits or approvals, allowing for all legally required processing and review including requests for additional information by the permitting or approval authority. The inability of the Permittee to obtain a permit in adequate time to allow compliance with the deadlines stated in this Consent Decree may be considered a force majeure event if the Permittee demonstrates that it exercised best efforts to timely fulfill its permitting obligations and has otherwise satisfied the requirements of Section XIV (Force Majeure) of this Consent Decree. If, after demonstrating compliance with the requirements of this Paragraph, the Permittee determines that it is unable to timely obtain a permit or approval necessary to install and continuously operate control technology under this Consent Decree, then the Permittee shall within 10 days notify EPA in writing pursuant to Section XIV (Force Majeure) of this Consent Decree and shall request an extension of time necessary to obtain such permit or approval and install and shake down the required improvements. If EPA determines that the Permittee's inability to timely obtain any such required permit or approval is a force majeure event, then the provisions of Paragraph 67 of this Consent Decree shall apply to extend the deadline for installation and commencement of Continuous Operation of the control technology and for achieving and maintaining compliance with the applicable 30-day rolling average emission limits. (Consent Decree Section X.40)
- 2. In addition to having first obtained any required preconstruction permits or other approvals pursuant to Paragraph 40 of this Consent Decree, within 3 months after the establishment of the final 30-day rolling average emission limit for NOx established pursuant to Section V (NO_x Control Technology, Emissions Limits and Monitoring Requirements), including Final Dispute Resolution if applicable, Defendant shall apply to NDEP to include the applicable requirements of Sections V.A (NOx Control Technology and Emission Limits) and VI.A (SO₂ Emission Limits), and any monitoring requirements, including those in Sections V.B (NOx Continuous Emission Monitoring System) and VI.B (SO₂ Continuous Emission Monitoring Systems) of this Consent Decree in a federally enforceable operating permit or other permit or approval issued under the SIP of Nevada and under authority independent of the NDEP's authority to issue Title V permits. For the purpose of this Paragraph, the ammonia monitoring requirements identified in Section V of this Consent Decree do not constitute NOx monitoring requirements. Following submission of the application for the permit or approval, the Permittee shall cooperate with NDEP by promptly submitting all information that such permitting authority seeks following its receipt of the application for the permit. The methods specified in this Consent Decree for demonstrating compliance with the limits in this Consent Decree are not intended to change the means by which the Permittee demonstrates compliance with standards not addressed by this Consent Decree. The requirements of this Paragraph are satisfied if a preconstruction permit was obtained, that permit serves as a state operating permit under the Nevada SIP and that permit contains the elements identified in this Paragraph. (Consent Decree Section X.41)
- 3. Upon issuance of any permit or approval required under Paragraphs 40 and 41 of this Consent Decree, the Permittee shall file any applications necessary to incorporate the requirements of that permit into the Title V operating permit of the Facility. The Permittee shall not challenge the inclusion in any such permit of the emission limits expressly prescribed in this Consent Decree (including, where applicable, 30-day rolling average emission limits for NOx determined in accordance with Appendix A) or of any other requirement of this Consent Decree. (Consent Decree Section X.42)
- 4. For each kiln, the Permittee shall provide U.S. EPA with a copy of each application for a permit to address or comply with any provision of this Consent Decree, as well as a copy of any permit proposed as a result of such application, to allow for timely U.S. EPA participation in any public comment opportunity. (Consent Decree Section X.43)



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section X. <u>United States EPA Consent Decree 3:17-cv-00302-MMD-WGC</u> (continued)

- F. <u>Permits</u> (continued)
 - 5. In lieu of incorporating the terms of the Consent Decree directly into a permit issued under a SIP pursuant to Paragraph 41 of this Consent Decree, the Permittee may request that NDEP submit the portions of the Consent Decree applicable to the Facility in Nevada to the U.S. EPA for approval under the State's SIP in accordance with 42 USC. 7410(k). Upon approval by the U.S. EPA, those portions of this Consent Decree will be incorporated into the Nevada SIP, and subsequently incorporated into Title V permits for the Facility consistent with applicable requirements in 40 CFR. Part 70 or Nevada-specific rules adopted and approved consistent with Part 70. The Permittee agrees not to contest the submittal of any such proposed SIP revision that incorporates the terms of this Consent Decree to U.S. EPA, or U.S. EPA's approval of such submittal, or the incorporation of the applicable portions of this Consent Decree through these SIP requirements into the Title V permits. (Consent Decree Section X.44)

G. <u>Test-and Set Protocol for NOx Emission Limit</u>

- Scope and Applicability
 - a. The Permittee shall comply with the requirements contained in this Appendix A of this Consent Decree regarding installation and optimization of selective non-catalytic reduction technology ("SNCR") and, if necessary, Low NOx Burners ("LNB") in establishing 30-day rolling average emission limits for NOx for Kiln 1 and Kiln 2 at the facility. (Consent Decree Appendix A.I.1)
 - b. If kiln operation is disrupted by unplanned outages, or excessive startups and shutdowns during the CEMS installation and operation period, baseline collection period, SNCR optimization period, or SNCR demonstration period, or if the kiln temporarily ceases operation for business or technical reasons, the Permittee may request that EPA extend the CEMS installation and operation period, baseline collection period, SNCR optimization period or SNCR demonstration period pursuant to Section XI (Review and Approval of Submittals) of this Consent Decree. EPA shall grant or deny the request and shall state the amount of time (if any) that the CEMS installation and operation period, baseline collection period, may be extended, which decision is subject to the Section XV (Dispute Resolution) provisions of the Consent Decree. The Permittee may not suspend the CEMS installation and operation period, baseline collection period, SNCR optimization period, or SNCR demonstration period until and unless EPA has granted the request. Data gathered during periods of disruption may not be used to determine any emission calculations or limitations unless both the Permittee and EPA agree to use the subject data. All collected data shall be included in each applicable report. (Consent Decree Appendix A.I.2)
- 2. CEMS Installation and Operation
 - a. No later than December 31, 2017, the Permittee shall complete installation on Kiln 2, a NOx continuous emissions monitoring system ("CEMS") certified and compliant with 40 CFR Part 60. By February 1, 2018, the Permittee shall complete installation of a NOx CEMS on Kiln 1 that is certified and compliant with 40 CFR. Part 60. (Consent Decree Appendix A.II.1)
 - b. The Permittee shall install an Ammonia CEMS on Kilns 1 and 2 in conjunction with the installation of the NOx CEMS pursuant to Paragraph II.1 of Appendix A in this Consent Decree. The Ammonia CEMS shall be operated whenever the NOx CEMS is used during baseline testing and the test-and-set processes. (Consent Decree Appendix A.II.2)



3.

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Section X. <u>United States EPA Consent Decree 3:17-cv-00302-MMD-WGC</u> (continued)

G. <u>Test-and-Set Protocol for NOx Emission Limit</u> (continued)

- **Baseline Collection Period**
 - a. The Permittee shall use CEMS to collect emissions data for NOx and Ammonia from the kilns. The Permittee shall monitor and collect operational data as discussed in Paragraph III.2.a of Appendix A of this Consent Decree. (Consent Decree Appendix A.III.1)
 - b. The baseline collection period shall begin within 30 days after installation of Ammonia CEMS and certified NOx CEMS on each kiln. The duration of the baseline collection period shall last for 120 operating days and be undertaken during periods of kiln operation. (Consent Decree Appendix A.III.2)
 - (1) The data collected during the baseline collection period and through to the end of the SNCR demonstration period or the LNB demonstration period shall include the following data derived from available direct monitoring or estimated from monitored or measured data: (Consent Decree Appendix A.III.2.a.i. through xiv)
 - (a) Kiln flue gas temperature at the inlet to the fabric filter or at the Kiln stack (daily average);
 - (b) Kiln production in tons of clinker (daily total) and the method used to calculate kiln production;
 - (c) Raw material feed in Tons (daily total);
 - (d) Type and percentage of each raw material used (daily);
 - (e) NOx, SO₂, and Ammonia concentrations (dry basis) and mass rates of NOx and SO₂ for Kilns 1 and 2;
 - (f) Flue gas volumetric flow rate (daily average in dry acfm);
 - (g) Feed burnability (C3S) (at least daily);
 - (h) Temperatures in or near the burning zone (by infrared or optical pyrometer);
 - (i) Kiln system fuel feed rate and type of fuel by weight or heat input rate (calculated to a daily average);
 - (j) Kiln amps (daily average);
 - (k) Kiln back end O₂ concentration (daily average);
 - (l) Kiln system draft fan settings;
 - (m) Documentation of any Startup, Shutdown, or Malfunction events; and
 - (n) An explanation of any gaps in the data or missing data.
 - (2) The Permittee shall submit a baseline collection report for each kiln within 30 days after the deadline for the end of the baseline collection period on each kiln. The baseline collection report shall include the data collected during the baseline collection period and a calculation of the baseline NOx emissions as defined in Paragraph 8.e of Section III (Definitions) of this Consent Decree. (Consent Decree Appendix A.III.2.b)
 - (3) Hours or days when there is no kiln operation shall be excluded from the calculation in Paragraph III.2.b of Appendix A of this Consent Decree. However, the Permittee shall provide an explanation in the baseline collection report for any data excluded and provide the excluded data in the baseline collection report. (Consent Decree Appendix A.III.2.c)
 - (4) When submitted, the Permittee shall provide the data to EPA in the baseline collection report in an electronic format, consistent with and able to be manipulated by Microsoft Excel, and shall explain the reasons for any data not collected for each of the parameters. (Consent Decree Appendix A.III.2.d)

****End of United States EPA Consent Decree Conditions****



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section XI. <u>Emission Caps</u>

A. Not Applicable.

****End of Emission Caps****



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Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section XII. <u>Surface Area Disturbance Conditions</u>

The surface area disturbance for Nevada Cement is 45 acres.

A. Fugitive Dust (NAC 445B.22037)

a.

- 1. The Permittee may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.
- 2. Except as otherwise provided in NAC 445B.22037(4), the Permittee may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in NAC 445B.22037, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation.
 - The facility shall use the following Best Manage Practices (BMPs) for controlling dust on the project's disturbed areas:
 - (1) Use of a water truck on unpaved roads and during raw material delivery hours, unless the outside temperature or wind chill factor is 32 degrees F or below;
 - (2) Posting and limiting vehicle speeds to 10-15 miles per hour (mph);
 - (3) Ceasing mobile equipment operations, with the exception of raw material deliveries, during high wind events with sustained winds of 30 mph or more. The Permittee shall install and operate a wind speed monitor on-site within 60 days of permit issuance;
 - (4) Application of water sprays on material storage piles if visible emissions are observed, unless the outside temperature or wind chill factor is 32 degrees F or below;
 - (5) Use of either water sprays or chemical agent sprays for raw material stockpiles, except on Cement Kiln Dust. If visible emissions are observed, the dust suppression material shall be reapplied.
 - (6) Guzzler trucks shall unload material inside the clinker building;
 - (7) Use of covers on conveyor belts;
 - (8) Inform all subcontractors of their responsibilities for the control of fugitive dust while they are on the project site; and
 - (9) Training of equipment operators to recognize fugitive dust generation and having the authority to shut down operations until water truck arrives and sprays water on the disturbed areas.
 - b. The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - (1) Monitor and record the hours of operation of the water trucks and the raw material delivery hours, each.
 - (2) Monitor and record the outside temperature for each calendar day.
 - (3) Monitor and record the wind speed for each clock hour.
 - (4) Conduct and record an observation of visible emissions (excluding water vapor) on the material storage piles on a monthly basis and on property lines on a daily basis, while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall conduct and record a Method 9 visible emission test. Each Method 9 visible emission test shall be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A. The Permittee shall maintain in a contemporaneous log the following recordkeeping: the calendar date of any required monitoring, results of the monthly visible emissions, and any corrective actions taken.
- 3. Except as provided in NAC 445B.22037(4), the Permittee may not disturb or cover 5 acres or more of land or its topsoil until Permittee has obtained an Operating permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
- 4. The provisions of NAC 445B.22037(2) and (3) do not apply to:
 - a. Agricultural activities occurring on agricultural land; or
 - b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

******End of Surface Area Disturbance Conditions**

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Nevada Department of Conservation and Natural Resources • Division of Environmental Protection Bureau of Air Pollution Control Equility ID No. A0030 Parmit No. A D3241 0387 05

Facility ID No. A0030Permit No. AP3241-0387.05CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Section XIII. Schedules of Compliance

A. Not Applicable

****End of Schedule of Compliance ****



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection Bureau of Air Pollution Control Facility ID No. A0030 Permit No. AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

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Section XIV. <u>Amendments</u>

This permit:

- 1. Shall be posted conspicuously at or near the stationary source. (NAC 445B.318(5))
- 2. Shall expire and be subject to renewal five (5) years from: (NAC 445B.315(3)(a))

January 27, 2019

- 3. A <u>completed</u> application for renewal of an operating permit must be submitted to the Director on the form provided by the Director with the appropriate fee at least 240 calendar days before the expiration date of this operation permit (NAC 445B.3443(2)). The Director shall determine whether the application is complete within 60 days of receipt of the application (NAC 445B.3395).
- 4. Any party aggrieved by the Department's decision to issue this permit may appeal to the State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)

THIS PERMIT EXPIRES ON:	January 27, 2029			
	Signature:			
Issued by:		Jennifer Schumacher, EI, CPM Chief Bureau of Air Pollution Control		
	Phone:	(775) 687- 9551	Date:	Signature Date
jm XX/XXXX				



Facility ID No. A0030 *Permit No.* AP3241-0387.05 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Class I Non-Permit Equipment List

Appended to Permit #AP3241-0387.04

Emission Unit #	Emission Unit Description
IA1.001	North Tank #1 (43,758 gallon)
IA1.002	North Tank #2 (43,758 gallon)
IA1.003	Raw Mill Tank #3 (40,303 gallon)
IA1.004	Quarry Diesel Tank (12,000 gallon)
IA1.010	Cooling Tower



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 Facility ID No. A0030 Permit No. AP3241-0387.05

 CLASS I AIR QUALITY OPERATING PERMIT

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Appendix 1

Nevada Cement Company's Routine Dust Collector Maintenance Plan

NEVADA CEMENT COMPANY DUST COLLECTOR ROUTINE MAINTENANCE PLAN REV. 1/5/09

Daily Maintenance:

- 1. Check pressure drop
- 2. Monitor gas flow rate
- 3. Observe stack outlet: visually or with continuous monitor
- 4. Monitor cleaning cycle
- 5. Check compressed air pressure available on pulse-jet baghouses
- 6. Monitor discharge system; make sure dust is removed as needed
- 7. Walk through baghouse to check for proper visual, audible and thermal conditions

Weekly Maintenance

- 1. Check all moving parts on discharge systems
- 2. Check damper operation, bypass, isolation etc
- 3. Spot check bag tensioning on reverse air and shaker bags
- 4. Check compressed air lines including inline oilers, air filters, and air-oil separators
- 5. Blow out manometer lines
- 6. Check accuracy of temperature gauges
- 7. Check cleaning sequences to insure all valves are seating properly
- 8. Check drive components on fan
- 9. Calibrate opacity monitor on #2 kiln baghouse (2021-2022)

Monthly Maintenance

- 1. Perform all weekly maintenance tasks
- 2. Check fan for corrosion and blade wear
- 3. Check all hoses and clamps
- 4. Spot check bag seating condition and for bag leaks or holes
- 5. Inspect baghouse housing for corrosion
- 6. Opacity Monitor monthly operational checks and calibration

Quarterly Maintenance

- 1. Thoroughly inspect the bags
- 2. Check ducts for dust buildup
- 3. Check damper valves and door gaskets for proper seating
- 4. Inspect baffle plate for wear

Annual Maintenance

- 1. Check all welds and bolts
- 2. Check hopper for wear
- 3. Replace high wear parts on cleaning system

Dust Collector Mechanic's Daily Rounds

On a normal day, the dust collector mechanics strive to make inspections of all dust collectors throughout the plant. Problems encountered during the rounds that require attention are addressed as they are found. Depending on the extent of the repairs required, rounds might not be completed for that day, as time is dedicated to the repairs. Any uncompleted rounds will be covered the following day.

For the purpose of this report, the kiln baghouses will be addressed as two completely different items, but in general, the plant contains only two basic types of dust collectors: reverse air or pulse jet. The following items are checked as a matter of routine inspections for the two types of collectors:

Reverse air:

*Check air supply piping & pressure gauge

*Watch the magnahelic gauge as the dust collector cycles through the various compartments to verify operation of dampers & note differential pressure during normal collector operation

*Check air line oiler & water trap

*General inspection of fan (Bearing temperature, abnormal sounds or vibration, etc.)

*Watch dampers as they cycle- check linkages, air cylinders, & damper shafts.

*Check fan discharge for visible emissions

*Check conveying equipment for the collector as applicable (rotary feeders, screw conveyors, tipping valves, etc.)

Pulse jet:

*Check air supply piping & pressure gauge

*Watch the magnahelic gauge as the dust collector pulses & note differential pressure during normal collector operation

*Check/drain air line water trap

*Check pilot & diaphragm valves as collector cycles through the cleaning process

*General inspection of fan

*Check fan discharge for visible emissions

*Check conveying equipment for the collector as applicable

The D/C mechanics inspect the collectors in the following sequence:

- 1. When in use, the crusher water spray system (Dust Buster) is inspected and adjusted first thing in the morning.
- 2. No. 1 kiln baghouse- the following is checked:

- *Watch all compartments cycle (check the operation of all air cylinders & linkages, observe the bags as they deflate and inflate)
- *Check air supply piping & pressure gauge
- *Check air line oilers
- *Drain water traps
- *Check compartment hoppers (Are they hot or cold, do they sound empty or full?)
- *Check inlet & reverse air ducting and the operation of the reverse air duct bleed-in damper
- *Check reverse air fan
- *General inspection for material leaks in ductwork, hoppers & screws
- *Check for visible emissions
- 3. No. 2 kiln baghouse- the following is checked:
 - *Check operation & condition of hopper vibrators
 - *Check rotary feeders (Are they running & are they hot, which indicates material flow?)
 - *Check position of manual isolation dampers
 - *Check air line oilers and drain water trap
 - *Check operation of screw conveyors
 - *Watch opacity monitor as baghouse cycles, looking for spikes which can identify bad bags
 - *Check individual compartment magnahelics
 - *Check operation & condition of isolation and reverse air rams (observe all rams as the baghouse goes through its cycle)
 - *Check main baghouse differential pressure piping
- 4. No. 2 kiln water spray tower *Check hoses & piping
- 5. Drain water from big air receiver tank behind #3 MCC
- 6. 2001 (#2 kiln feed tank) reverse air
- 7. 405 (#1 kiln feed tank) reverse air
- 8. 305 (Blend silo) pulse jet
- 9. 601 (Syn. Gyp. Silo 7) reverse air
- 10. 618 (old cement silos) pulse jet
- 11. 612 (old bulkloading) pulse jet
- 12. 611 (South rail tank) pulse jet
- 13. 710 (Packhouse) reverse air
- 14. 634-9 (Flyash unloading) pulse jet
- 15. New cement silos- Check condition of flex hoses on all Loadout spouts
- 16. 652 (east loadout) pulse jet
- 17. 653 (west loadout) pulse jet
- 18. 646-1 (silo 12) pulse jet
- 19. 646-2 (silo 14) pulse jet
- 20. 646-3 (silo 15) pulse jet
- 21. 2238-3 (syn. gyp. day tank) pulse jet
- 22. 2119 (2 & 3 FM reclaim) pulse jet
- 23. 2207-1 (2 FM) pulse jet
- 24. 2207-2 (3 FM) pulse jet
- 25. 2102 (#2 clinker elev. & 2201 drag) pulse jet
- 26. 2101-4 (#2 clinker tube) pulse jet
- 27. 412-4 (#1 clinker tube) pulse jet
- 28. 510 (1 FM) reverse air
- 29. 210 (1 RM) pulse jet

- 30. 1914-1 (2 RM feeder section) pulse jet
- 31. 1914 (2 RM separator) pulse jet
- 32. 1914-2 (2 RM mill sweep) pulse jet
- 33. Check condition of 220-8 crusher dust tank aeration blower filter
- 34. 516 (1 FM feeder section) pulse jet
- 35. 105 (primary crusher) reverse air
- 36. Drain water from all air line drip legs in crusher area (4 ea.)
- 37. 108-4 (secondary crusher & shaker screen) pulse jet



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 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Appendix 2

Nevada Cement Company's 40 CFR Part 63 Subpart LLL Operation and Maintenance Plan

OPERATION AND MAINTENANCE PLAN

INCLUDING START-UP SHUTDOWN AND MALFUNCTION PLAN

TABLE OF CONTENTS

BACKGROUND OF OPERATION AND MAINTENANCE OF	
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RECORDKEEPING AND REPORTING	Page 11
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GENERAL OPERATION AND MAINTENANCE OF	
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OPERATION AND MAINTENANCE PLAN NEVADA CEMENT COMPANY

BACKGROUND OF OPERATION AND MAINTENANCE OF THE AFFECTED SOURCES

Nevada Cement Company, an area source¹ of Hazardous Air Pollutants as defined in 40 CFR 63.2, has prepared this Operations and Maintenance Plan (OMP) to comply with 40 CFR 63, Subpart LLL, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Portland Cement Manufacturing Industry and with NCCs operating permit, AP3241-0387.01 sections VI.I.a.(xvi).(a) and VI.Q.4.a.(xviii).(a). The kilns are the only emission source affected by Subpart LLL. Dioxin/furan emissions from the kilns must be controlled to meet the following standards:

- 0.20 ng TEQ/dscm (8.7×10^{-11} gr/dscf), or
- 0.40 ng TEQ/dscm (1.7x10⁻¹⁰ gr/dscf) when the average of the performance test run average particulate matter control device (PMCD) inlet temperatures is 204 ° C (399°f) or less. [Corrected to7 percent oxygen]. The kilns must be operated such that the three-hour rolling average PMCD inlet temperature is no greater than the temperature established at performance test.

Subpart LLL Sec. 63.1350, Monitoring requirements, specifies the OMP requirements for an area source. The requirements to be included in the OMP are:²

- Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits.
- Procedures for the yearly inspection of the combustion system components of each kiln.

² Opacity requirements apply to major sources only.

Operations and Maintenance Manual for MACT, Subpart LLL

Nevada Cement Company

¹ Area source means any stationary source of hazardous air pollutants (HAPs) that is not a major source, i.e., area sources emit less than 10 tons/year of any one HAP, and less than 25 tons/year of all facility-wide HAPs.

This OMP document will outline these requirements in detail. The remainder of this document is organized as follows:

- Facility Process Description and Emission Control
- Temperature Limit and Monitoring
- Annual Inspections
- Recordkeeping
- Start-up, Shutdown and Malfunction Plan (SSMP)
- General Operations and Maintenance of Kilns and Coal Mills (Addendum)

FACILITY PROCESS DESCRIPTION

The NCC facility is a Portland cement plant located approximately 1.0 miles northwest of Fernley, Nevada. Facility property is located in Lyon County, Nevada and Washoe County, Nevada. The county line runs through the north end of the plant property while the air quality sources are located in the south end, in Lyon County.

The Portland cement produced at the NCC Facility is a cementitious, crystalline compound composed primarily of calcium silicates. Limestone containing calcium carbonate and aluminum, iron and silicon oxides, clay, and sand are combined and fired in one of two rotary kilns where the raw materials are calcined and sintered through the pyroprocess to create cement clinker. The cement clinker is then refined by grinding and milling, and then stored for shipping. The Standard Industrial Classification (SIC) number for the facility-wide process is 3241.

After crushing, drying/grinding, and blending, the finely ground raw materials are discharged from the blending silos and pneumatically conveyed via jet line to the kiln feed tanks. Each kiln feed tank is equipped with a baghouse dust collector. The raw materials are fed into one of two inclined kilns and fired or "burned."

Emissions

Particulate emissions from the kiln feed systems are controlled by baghouses. Particulate emissions from the kilns themselves are controlled by two large baghouses, one for each kiln. Emissions of SO_2 generated from the combustion of the coal/coke blend used by NCC, are controlled by the rotary kiln process itself. The advantage of using a rotary kiln process is that the SO_2 gases are exposed to lime (CaO) and limestone (CaCO₃) dust in the kiln and baghouse, and are reduced through reaction with the lime components to solid CaSO₄·x(H₂O).

Dioxin/furan emissions are the hazardous air pollutants of concern from the cement kilns. Temperature of the combustion gases (i.e., flue gases) is perhaps the single most important factor in controlling dioxin-like compounds. Temperatures between 200° and 450° Celsius (C) (392°-842° F) are most conducive to forming dioxin/furan compounds, with maximum formation occurring at around 350°C (662° F). If temperature falls outside this range in temperature, the amount of dioxin/furans (D/F) formed is minimized. Maintaining complete or nearly complete combustion and temperature control of the combustion gases of the coal/coke fuel used to fire the kilns helps to control D/F emissions. In order to ensure complete combustion, kiln gas temperatures at several points are continuously monitored as well as the temperature at the entrance to the particulate matter control device (PMCD or baghouse). Oxygen, NOx and CO levels at the back end (gas discharge area) are also monitored continuously.

For initial compliance demonstration, NCC completed initial performance testing. Future compliance demonstration must be performed every 30 months from the initial performance test date. For continuous monitoring, NCC is required to install, operate, calibrate and maintain a continuous inlet temperature monitoring and recording system for the PMCD; NCC must calculate three-hour rolling averages and verify the temperature sensor calibration at least quarterly.

TEMPERATURE LIMTS AND MONITORING

The temperature limit (40 CFR 63.1344(b)) for the inlet to the baghouses was determined in the initial performance testing. For the inlet to the kiln #1 baghouse the temperature limit is 531°F (277°C) and for kiln #2 the baghouse inlet temperature is 500°F(260°C). For compliance purposes, these temperatures are based on 3-hour rolling averages, as discussed below.

According to the monitoring requirements of 40 CFR 63.1350(f), NCC must monitor D/F emissions. NCC must do the following:

- NCC must install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from kiln #1 and kiln #2 at the inlet to, or upstream of the kiln baghouse. The recorder response range must include zero and 1.5 times either of the average temperatures established during the performance test³. The average temperatures are 531°F for the kiln #1 baghouse and 500°F for the kiln #2 baghouse. The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- NCC must monitor and continuously record the temperature of the exhaust gases at the entrance to the kiln PMCD.

³ According to the requirements in 40 CFR. 63.1349(b)(3)(iv). Operations and Maintenance Manual for MACT, Subpart LLL Nevada Cement Company Page 4

- The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
- Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
- The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months. NCC will date and record the calibration results.

If NCC detects that the temperature has exceeded the established standards, the following steps are taken:

- Determine the cause of the high temperature. Adjust water pump to the baghouse inlet as necessary to lower the temperature. This water flow is computer controlled, based on the temperature at the baghouse inlet.
- # 2 kiln is equipped with a dilution air damper that is programmed to open automatically if the baghouse (PMCD) inlet temperature rises above 525° F for a period of 60 seconds. Temperature standard for # 2 kiln baghouse inlet is 500° F.
- If the cause of the temperature spike can be determined immediately and corrected immediately, then document the cause and corrective action taken and include in the semi-annual report to EPA Region 9 and the Nevada Bureau of Air Pollution Control (BAPC).
- If the cause cannot be determined immediately, then shut down the kiln operation according to the Start-up, Shutdown, and Malfunction Plan (SSMP).
- Once the cause of the high temperature has been determined, perform corrective action and restart the kiln. Document the corrective action and include in the semi annual report to EPA Region 9 and Nevada BAPC.
- Follow startup procedures prescribed in the section on SSMP.

NCC shall submit a summary report semiannually to EPA and Nevada BAPC, which contains the information specified below.

- All excursions above the maximum inlet gas temperature limits to the inlet of the kiln #1 and kiln #2 baghouses (or PMCD);
- All failures to calibrate thermocouples and other temperature sensors as required under Sec. 63.1350(f)(6) of subpart LLL.

The summary report shall be entitled "Summary Report -- Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

- The company name and address of the affected source;
- An identification of each hazardous air pollutant monitored at the affected source;
- The beginning and ending dates of the reporting period;
- A brief description of the process units;
- The emission and operating parameter limitations specified in the relevant standard(s);
- The monitoring equipment manufacturer(s) and model number(s);
- The date of the latest CMS certification or audit;
- The total operating time of the affected source during the reporting period;
- An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;
- A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime

expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

- A description of any changes in CMS, processes, or controls since the last reporting period;
- The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- The date of the report.

ANNUAL INPSECTION

An annual inspection is required for the combustion unit of each kiln. To shut down the kiln for the inspection, see the section on start-up, shutdown and malfunction plan (SSMP). If any maintenance is performed, NCC will document it and include it as part of the recordkeeping requirements.

Annual inspection of Combustion Unit for Kiln #1 (i.e. No 1 Coal Mill)

INSPECT DRIVE

Pull apart the 1/2 Omega E-70HD coupling inspect inside for cracks and replace as necessary

INSPECT CLASSIFIER CONE AND DISCHARGE

Inspect cone for wear and holes

THE FOLLOWING CHECKS MUST BE MADE WITH THE TOP COVER OF THE TEMPERING "T" OFF

INSPECT ALL MILL CLASSIFIER/DEFLECTORS FOR WEAR & PROPER MOVEMENT & POSITION, INCLUDING:

Classifier cone Inverted cone for wear Top "I" assembly & turning vane for wear Top elbow assembly & turning vane for wear

INSPECT EXHAUSTER PARTS:

Operations and Maintenance Manual for MACT, Subpart LLL Nevada Cement Company Page 7 Door and inlet elbow for wear Fan for wear (replace if necessary) Fan shaft nut for tightness Fan housing for wear Check fan housing base bolts for tightness Inlet damper for wear

INSPECT MILL BOWL

Bowl extension rings for wear Bowl side liners for wear Bowl bottom wear plate for wear Shaft nut cover bolt for tightness Inspect upper mill side and angle deflector liners Restriction angles Separator bottom liner

INSPECT MILL BOWL UNDERSIDE

Lower mill side liners for wear Lower mill corner liners for wear Bottom cover liners for wear Scraper and scraper guards for excessive wear or play Air inlet for wear & build up

INSPECT THE FOLLOWING AT THE MILL ROLLS

Rolls for free movement and wear (replace if necessary) Upper journal housing covers for wear Journal head skirts (shaft liners) for wear Saddle liners (behind journal shafts) for wear Air seal and clamp assy's (outside where journals enter the mill) Journal shaft lock nut Journal shaft lock nut Journal saddle cap screws (mounting bolts) for tightness AND Adjust Roll to bowl clearances (1/4" to 3/8" at the top 3/8" to 1/2" at the bottom)

Annual inspection of Combustion Unit for Kiln # 2 (i.e. No 2 Coal Mill) INSPECT DRIVE

Pull apart the 1/2 Omega E-70HD coupling inspect inside for cracks and replace as necessary

INSPECT CLASSIFIER CONE AND DISCHARGE

Inspect cone for wear and holes

THE FOLLOWING CHECKS MUST BE MADE WITH THE TOP COVER OF THE TEMPERING "T" OFF

INSPECT ALL MILL CLASSIFIER/DEFLECTORS FOR WEAR & PROPER MOVEMENT & POSITION, INCLUDING:

Classifier cone Inverted cone for wear Top "I" assembly & turning vane for wear Top elbow assembly & turning vane for wear

INSPECT EXHAUSTER PARTS:

Door and inlet elbow for wear Fan for wear (replace if necessary) Fan shaft nut for tightness Fan housing for wear Check fan housing base bolts for tightness Inlet damper for wear

INSPECT MILL BOWL

Bowl extension rings for wear Bowl side liners for wear Bowl bottom wear plate for wear Shaft nut cover bolt for tightness Inspect upper mill side and angle deflector liners Restriction Angles Separator bottom liner

INSPECT MILL BOWL UNDERSIDE

Lower mill side liners for wear Lower mill corner liners for wear Bottom cover liners for wear Operations and Maintenance Manual for MACT, Subpart LLL Nevada Cement Company Page 9 Scraper and scraper guards for excessive wear or play Air inlet for wear & build up

INSPECT THE FOLLOWING AT THE MILL ROLLS

Rolls for free movement and wear (replace if necessary) Upper journal housing covers for wear Journal head skirts (shaft liners) for wear Saddle liners (behind journal shafts) for wear Air seal and clamp assy's (outside where journals enter the mill) Journal shaft lock nut Journal saddle cap screws (mounting bolts) for tightness And, adjust roll-to-bowl clearances (1/4" to 3/8" at the top 3/8" to 1/2" at the bottom) Motor bolts for tightness Motor to worm shaft coupling and alignment Mill base bolts for tightness

RECORDKEEPING

NCC must maintain files of all information, including all reports and notifications, required under subpart LLL. These must be recorded in a form suitable and readily available for inspection and review as required. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

START-UP, SHUTDOWN AND MALFUNCTION PLAN (SSMP)

Start up of a kiln following a maintenance shutdown proceeds as follows:

- * Start all auxiliary systems (plant water cooling system and plant air compressors)
- * Start the I. D. (induced draft) fan
- * Insert the portable natural gas burner pipe into the kiln and light it
- * Start the air reversal fan (kiln #1)
- * Start baghouse dust return systems on both kilns
- * Heat kiln slowly with natural gas, turning as needed to distribute the heat evenly
- * Maximum heat rate, no more than 100°F per hour
- * When kiln temperature reaches 1450 °F, start raw feed, as well as coal mill/fan, coal rotary airlock, and coal feed belt. At the same time the shell cooling fan and nose fan are started
- Remove the natural gas burner pipe after secondary air temperature from cooler has reached 1000 °F
- * Monitor feedrate, temperatures, coal/coke feedrate, I. D. fan draft and discharge hood draft

Shut Down of a kiln for maintenance should proceed as follows:

- * Shut off the coal belt feeder, coal mill rotary valve, coal mill and coal fan
- * Slow the kiln speed and reduce draft by closing louvers on I.D. fan
- * Shut off kiln shell cooling fan and nose ring fan
- * Shut off raw feed to kiln by turning the kiln feed tank rotary feeder off and letting constant head feeder run empty
- * Cool the kiln, while rotating, no faster than 100°F per hour
- * Kiln must cool 12-16 hours before stopping to prevent shell or refractory liner damage

Malfunctions: There are several malfunctions that can occur with a cement kiln. Only the most common will be addressed here.

Hot spot on the shell. This usually indicates wear of the refractory or brick. Portable shell fans can be placed near the hot spot to keep the shell cool until a major shutdown can be planned. In extreme cases, an immediate shutdown is required to perform brick repairs.

High draft at the I. D. fan. This phenomena is caused by material building up on the inside of the kiln, forming a "ring" and reducing the cross sectional area, hence increasing the draft through the kiln. This can have many causes. Reactions to this situation can include:

- * Speed up the fuel feed rate to attempt to burn out the ring
- * Slow down the raw material feed rate to attempt to burn out the ring
- * Adjust the coal/coke ratio to try to modify the flame characteristics and cause the ring to fall
- * Stop the raw feed, stop the fuel feed, cool the kiln and shoot the ring out (physically)

Power Bump (Unplanned Interruption of Electric Power). There are many pieces of equipment associated with a cement kiln that require cooling water or air. To prevent damage to this equipment, cooling water must be re-introduced as quickly as possible following a power bump. If the power outage is extended, the following must be accomplished:

- * Start fresh water flow to the kiln bearings and other moving parts requiring cooling
- * Start up the auxiliary motor for the kiln drives and engage the clutches to turn the kilns and prevent warping

ADDENDUM

GENERAL OPERATIONS AND MAINTENANCE OF KILNS AND COAL MILLS

No. 1 Kiln (Equipment #406)

OPERATIONS:

Start I.D fan Check baghouse for leaks Inspect ductwork around I.D fan for leaks Start dust screws under baghouse Start dust insufflations system Check kiln temperature Initiate feed when temperature is correct Monitor kiln shell temperature Monitor duct work around I. D. fan for dust leaks

MAINTENANCE: # 1 kiln drive:

INSPECT THE FOLLOWING:

Pony motor lines, base Planetary gearbox, base Falk coupling Omega coupling on Planetary Omega Coupling 50HD Angle drive (90 deg) box seals, base Jaw clutch & engagement assembly Jaw coupling Battery box Main gear box seals Falk coupling on main drive Covers on ring gear housing Guards Pull fan cover back on Rex Planetgear reducer and check the set screws on the fan Housekeeping (is the area clean?) Fire Extinguishers (are they there and charged?) Fuel tank for pony motor (is it full and not leaking?)

Glass Bag Dust Collector, No. 1 Kiln (Equipment #419)

OPERATIONS:

Inspect hoppers under dust collector (should be hot)

Check operation of all screw conveyors in vicinity of dust collector Verify proper sequencing of reverse air cleaning dampers – minimum of once/day Do an hourly visual inspection of plenum (discharge) If dust is observed, do an EPA Method 22 inspection Perform a daily EPA Method 9 visual inspection of Equipment #419

MAINTENANCE:

INSPECT DUST COLLECTOR PARTS AS FOLLOWS:

Housing / hopper

Air supply / Lubricator / Regulator

Reverse air gates / Actuator / Linkage / Upper and Lower Rams

Compartment Internals

Ducts condition

Bag Changes, if needed

Check spring tensioner when changing bags out in a compartment

Check the rack that the bags hang from.

Inspect the tube sheets

Check ID fan duct

Check dampers and all-thread on the 16 compartments

No 1Coal Mill (Equipment #805)

OPERATIONS:

Start fan Start Coal Mill Start rotary airlock Check Feed Rate Setting Start Belt Feeder Check flame in kiln Inspect coal pipe duct and fan housing for leaks

MAINTENANCE:

Inspect Drive Belts Inspect ductwork for leaks Check fan housing and blades for wear Clean dust from motor and housing Grease all bearings as per specifications

No. 2 Kiln (Equipment #2013)

OPERATIONS:

Start I.D fan.Check baghouse for leaks.Inspect ductwork around cyclones and cooling tower for leaks.Start dust screws under baghouse.Start dust insufflations system.Check kiln temperatures.Monitor kiln shell temperature.Monitor duct work around kiln baghouse for dust leaks.

MAINTENANCE: # 2 kiln drive:

INSPECT THE FOLLOWING:

Pony motor lines, base Planetary gearbox, base Falk coupling Omega coupling on Planetary

Operations and Maintenance Manual for MACT, Subpart LLL Nevada Cement Company Page 15 Omega Coupling 50HD Angle drive (90 deg) box seals, base Jaw clutch & engagement assembly Jaw coupling Battery box Main gear box seals Falk coupling on main drive Covers on ring gear housing Guards Pull fan cover back on Rex Planetgear reducer and check the set screws on the fan Housekeeping (is the area clean?) Fire Extinguishers (are they there and charged?) Fuel tank for pony motor (is it full and not leaking?)

Glass Bag Dust Collector, No. 2 Kiln (Equipment #9109)

OPS:

Inspect hoppers under dust collector (should be hot) Check operation of all screw conveyors in vicinity of dust collector Inspect feeders to be sure they are operating Verify proper sequencing of reverse air cleaning dampers – minimum of once/day Do an hourly visual inspection of stack.

MAINTENANCE:

INSPECT DUST COLLECTOR PARTS AS FOLLOWS:

Housing / hopper Air supply / lubricator / regulator Actuator / linkage Compartment Internals Magnehelic (differential pressure gauge) Ducts condition Bag changes, as needed Isolation dampers Reverse air dampers Racks Spring tensioners Air rams

Operations and Maintenance Manual for MACT, Subpart LLL Nevada Cement Company Page 16

No 2 Coal Mill (Equipment #2043)

OPS:

Start fan Start coal mill Start rotary airlock Check feed rate setting Start belt feeder Check flame in kiln Inspect coal pipe duct and fan housing for leaks

MAINTENANCE:

Inspect Drive Belts

Inspect ductwork for leaks

Check fan housing and blades for wear

Clean dust from motor and housing

Grease all bearings as per specifications



 Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

 Bureau of Air Pollution Control

 Facility ID No. A0030
 Permit No. AP3241-0387.05

 CLASS I AIR QUALITY OPERATING PERMIT

Issued to: NEVADA CEMENT COMPANY (AS PERMITTEE)

Appendix 3

EPA Consent Decree (Civil Action Number 3:17-cv-00302-MMD-WGC)

1	BRUCE S. GELBER	
2	Deputy Assistant Attorney General	
	Environment & Natural Resources Div United States Department of Justice	ision
3	Since States Department of Justice	
4	DAVID L. McILWAIN Environmental Enforcement Section	
5	Environmental Emorcement Section Environment & Natural Resources Div	ision
6	United States Department of Justice	
7	601 D Street, N.W., PHB Building Telephone: (202) 514-1544	
8	Facsimile: (202) 514-0097	
1.2.1	E-mail: David.McIlwain@usdoj.gov	
9	DANIEL G. BOGDEN	
10	United States Attorney	
11	District of Nevada GREG ADDINGTON	
12	Assistant United States Attorney	
13	100 West Liberty Suite 600	
14	Reno, NV 89501	
15	Telephone: (775) 784-5438 Facsimile: (775) 784-5181	
16	Attorneys for Plaintiff United States of	America
17	INTERS OF A TE	S DISTRICT COURT
18		S DISTRICT COURT T OF NEVADA
19 20	UNITED STATES OF AMERICA,) Civil Action No. 3:17-cv-00302-MMD-WG0
21	Plaintiff,)
22) CONSENT DECREE
	v.)
23	NEVADA CEMENT COMPANY	()
24	Defendant.	
25)
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27		
28		
20		

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WHEREAS, Plaintiff, the United States of America, on behalf of the United States Environmental Protection Agency (herein "U.S. EPA" or "EPA") has, simultaneously with the lodging of this Consent Decree, filed a Complaint against Defendant Nevada Cement Company ("Defendant" or "Nevada Cement Company"), pursuant to Sections 113(b) and 167 of the Clean Air Act ("Clean Air Act or Act"), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and the assessment of civil penalties for violations of the following statutory and regulatory requirements of the Act at the Defendant's Portland cement plant located in Fernley, Nevada: the Prevention of Significant Deterioration ("PSD") provisions of the Act, Sections 160-169, 42 U.S.C. §§ 7470-7492; the New Source Performance Standards ("NSPS") provisions of the Act, Section 111, 42 U.S.C. § 7411; and the federally-approved and enforceable state implementation plan ("SIP"), which incorporate and/or implement the above-listed federal PSD requirements;

WHEREAS, this Consent Decree sets forth injunctive relief in which Defendant has agreed to substantially reduce its emissions of nitrogen oxide and limit its emissions of sulfur dioxide in such a manner that would resolve Defendant's alleged violations of the PSD and NSPS requirements of the Act;

WHEREAS, U.S. EPA has provided notice of the violations alleged herein to the Defendant and to the State of Nevada where Defendant's Facility is located, pursuant to Section 113(a) of the Act, 42 U.S.C. § 7413(a), and Defendant stipulates that it has received actual notice of the violations alleged in the Complaint and that it does not contest the adequacy of the notice provided;

WHEREAS, Defendant denies the allegations of the Complaint and does not admit that it has any liability to the United States for civil penalties or injunctive relief arising out of the transactions and occurrences alleged in the Complaint; WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I (Jurisdiction and Venue), below, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

SECTION I: JURISDICTION AND VENUE

1. This Court has jurisdiction of the subject matter herein and over the Parties consenting hereto pursuant to Sections 113(b), 167, and 304(a) of the Act, 42 U.S.C. §§ 7413(b), 7477, and 7604(a), and pursuant to 28 U.S.C. §§ 1331, 1345, 1355 and 1367(a). Venue is proper under Sections 113(b) and 304(c) of the Act, 42 U.S.C. §§ 7413(b) and 7604(c), and under 28 U.S.C. §§ 1391(b) and (c) and 1395(a). For purposes of this Consent Decree and the underlying Complaint, Defendant waives all objections and defenses it may have to the Court's jurisdiction over this action, to the Court's jurisdiction over the Defendant, and to venue in this District. For the purposes of the allegations in the Complaint in this matter that are being resolved by the Consent Decree, Defendant waives any defense or objection based on standing.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Sections 113, 165 and 167 of the Act, 42 U.S.C. §§7413, 7475 and 7477.

SECTION II: APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States and upon the Defendant, and any successors, assigns, or other entities or persons otherwise bound by law.

4. At least 30 Days prior to any transfer of ownership or operation of the Facility, Defendant shall provide a copy of this Consent Decree to the proposed transferee and, by the same deadline, shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement to transfer ownership of the Facility, to U.S. EPA and the United States in accordance with Section XIX (Notices) of this Consent Decree. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Decree are implemented, unless:

a. the transferee agrees, in writing, to undertake the obligations required by Sections V (NO_x Control Technology, Emission Limits, and Monitoring Requirements), VI (SO₂ Emission Limits and Monitoring Requirements), VII (Other Injunctive Relief), VIII (Temporary Cessation of Kiln Operations), IX (Prohibition on Netting Credits or Offsets from Required Controls), X (Permits), XI (Review and Approval of Submittals), XII (Reporting Requirements), XIII (Stipulated Penalties), XIV (Force Majeure), XV (Dispute Resolution), XVI (Information Collection and Retention) and the requirements of Appendices A and B of this Consent Decree applicable to the Facility or Kilns and further agrees in writing to be substituted for the

Defendant as a Party under the Decree with respect to Facility or Kilns and 1 2 thus become bound by the terms thereof; 3 b. the United States determines that the transferee has the financial and technical 4 ability to assume the Consent Decree's obligations applicable to such Facility 5 or Kilns; 6 7 c. the United States consents, in writing, to relieve Defendant of its Consent 8 Decree obligations applicable to the Facility or Kilns; and 9 d. the Court approves the transferee becoming a party to this Consent Decree 10 with respect to the transferred Facility or Kilns, pursuant to Section XXII 11 (Modification). 12 13 5. Any transfer of ownership or operation of the Facility or Kilns, or any 14 portion thereof, without complying with Paragraph 4, constitutes a violation of this 15 Consent Decree. 16 6. The Defendant shall provide a copy of this Consent Decree to all officers, 17 employees, and agents whose duties might reasonably include compliance with any 18 19 provision of this Consent Decree, as well as to any Contractor retained to perform 20 work required under this Consent Decree. Defendant shall condition any such 21 contract upon performance of the work in conformity with the terms of this Consent 22 Decree. 23 24 7. In any action to enforce this Consent Decree, Defendant shall not raise as 25 a defense the failure by any of its officers, directors, employees, agents, or contractors 26 to take any actions necessary to comply with the provisions of this Consent Decree. 27 28 5

SECTION III: DEFINITIONS

8. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated by U.S. EPA pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Consent Decree. Definitions stated in this Consent Decree are exclusively for the purpose of interpreting and applying the Consent Decree terms and are not intended to establish any type of determination under circumstances not covered by the Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "30-Day Rolling Average Emission Limit" shall mean, with respect to the Kilns, the maximum allowable rate of emission of a specified air pollutant from such Kiln and shall be expressed as pounds (lbs.) of such air pollutant emitted per Ton of clinker produced. Compliance with the 30-Day Rolling Average Emission Limit shall be determined in accordance with the definition of 30-Day Rolling Average Emission Rate. A new compliance determination of the 30-Day Rolling Average Emission Limit shall be calculated for each new Operating Day in accordance with the provisions of this Consent Decree. In calculating each compliance determination of the 30-Day Rolling Average at the Kilns, the total pounds of such air pollutant emitted from the Kiln during a specified period (Operating Day or 30-Day Period) shall include all emissions of that pollutant from the subject Kiln that occur during the specified period;

b. "30-Day Rolling Average Emission Rate" shall mean, with respect to the Kilns, the rate of emission of a specified air pollutant from such Kiln and shall be expressed as pounds (lbs.) of such air pollutant emitted per Ton of clinker produced. Compliance with the 30-Day Rolling Average Emission Limit shall be determined by calculation of a 30-Day Rolling Average Emission Rate in accordance with the following procedure: first, sum the total pounds of the air pollutant in question emitted from the Kiln during that Operating Day and the previous twenty-nine (29) Operating Days as measured pursuant to Section V.B. (NOx and Ammonia Continuous Emission Monitoring Systems), or Section VI.B. (SO₂ Continuous Emission Monitoring Systems), as applicable; second, sum the total Tons of clinker produced by the Kiln during the same Operating Day and previous 29 Operating Days; and third, divide the total number of pounds of the air pollutant emitted from the Kiln during the thirty (30) Operating Days by the total Tons of clinker produced by such Kiln during the same 30 Operating Days. A new compliance determination of the 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day in accordance with the provisions of this Consent Decree. In calculating each 30-Day Rolling Average Emission Rate in accordance with this Paragraph 8.b, for NO_x or SO₂ at the Kilns, the total pounds of such air pollutant emitted from the Kiln during a specified period (Operating Day or 30-Day Period) shall include all emissions of that pollutant from the subject Kiln that occur during the specified period;

 c. "Ammonia CEMS" shall mean, for obligations involving ammonia under this Consent Decree, the total equipment and software required to sample, analyze, and to provide a

record of ammonia concentration and the raw data necessary to support the reported 1 2 emissions; 3 d. "Ammonia Slip" shall mean the amount of unreacted ammonia contained in emissions 4 from Defendant's Kilns. Ammonia Slip shall be calculated by subtracting Baseline 5 Ammonia from Stack Ammonia; 6 "Baseline NOx Emissions" shall mean the average (arithmetic mean) of all daily 7 e. 8 emissions of NOx from each Kiln during the Baseline Collection Period consistent with 9 Appendix A and shall be based upon an analysis of CEMS data and clinker 10 production data from each Kiln; 11 "Baseline Ammonia" shall mean the average (arithmetic mean) of all daily average f. 12 ammonia concentrations from each Kiln during the Baseline Collection Period consistent 13 with Appendix A and shall be based upon an analysis of CEMS data from each Kiln. 14 15 Baseline Ammonia shall reflect Ammonia measured by the Ammonia CEMS only during 16 periods of time when the SNCR is not injecting any reagent into the Kilns; 17 "Business Day" means any Day, except for Saturday, Sunday, and federal holidays. g. 18 In computing any period of time used as a deadline for submission under this Consent 19 Decree, where the last Day would fall on a Saturday, Sunday, or federal holiday, the 20 21 period shall run until the close of business of the next Business Day; 22 h. "CEMS" or "Continuous Emission Monitoring System" shall mean, for obligations 23 involving NO_x and SO₂ under this Consent Decree, the total equipment and software 24 required to sample and condition (if applicable), to analyze, and to provide a record of 25 NO_x and SO₂ emission rates, and the raw data necessary to support the reported 26 27 28

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emission rates, and that have been installed, calibrated and certified in accordance
with 40 C.F.R. § 60.13 and 40 C.F.R. Part 60 Appendix B and Appendix F;
i. "Commence" or "Commencement" of operation of a Control Technology shall mean
to begin the introduction of the reagent employed by the Control Technology, as
applicable to that technology, or where the technology is otherwise activated;
j. "Complaint" shall mean the complaint filed by the United States in this action;
k. "Consent Decree" or "Decree" shall mean this Consent Decree and each Appendix
attached hereto (listed in Section XXVIII (Appendices)), but in the event of any
conflict between the text of this Consent Decree and any Appendix, the text of this
Consent Decree shall control;
1. "Continuously Operate" or "Continuous Operation" shall mean that when a Control
Technology required by this Consent Decree is used at a Kiln, it shall be operated at
all times of Kiln Operation, consistent with the technological limitations,
manufacturers' specifications, and good engineering and maintenance practices for
such Control Technology and the Kiln. A SNCR that is injecting no reagent is not
Continuously Operating; however, the requirement to continuously operate SNCR
does not require that the SNCR be operated under conditions where the Kiln has not
reached or is no longer maintaining the minimum temperature for reagent injection.
This Paragraph is not intended to require any minimum level of reagent injection after
the 30-Day Rolling Average Emission Limit has been established in accordance with
Paragraph 8.a;
m. "Contractor" shall mean any person or entity hired by Defendant to perform services

m. "Contractor" shall mean any person or entity hired by Defendant to perform services on its behalf necessary to comply with the provisions of this Consent Decree;

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1	n. "Control Technology" or "NOx Control Technology" shall mean Selective Non-
2	Catalytic Reduction or Low-NOx Burner technology;
3	o. "Date of Lodging of the Consent Decree" or "Date of Lodging" shall mean the date
4	the Consent Decree is filed for lodging with the Clerk of the Court for the United
6	States District Court for the District of Nevada;
7	p. "Day" shall mean a calendar day unless expressly stated to be a Business Day;
8	q. "Defendant" or "Nevada Cement" shall mean Nevada Cement Company;
9 10	r. "Effective Date" shall have the meaning given in Paragraph 98;
11	s. "Facility" shall mean the Defendant's Portland cement manufacturing plant located
12	just north of Interstate Highway 80 near Fernley, Nevada;
13	t. "Kiln" as used in this Consent Decree shall mean each device located at the Facility,
14	including any associated preheater devices, that produces clinker by heating
15 16	limestone and other materials for subsequent production of Portland cement. The tw
17	Kilns at the Facility are designated Kiln #1, which is a long dry rotary kiln, and Kilr
18	#2, which is a long dry rotary kiln with a single-stage preheater;
19	u. "Kiln Operation" shall mean any period when any raw materials are fed into the Kil
20	or any combustion is occurring in the Kiln;
21	v. "Low-NO _x Burner" or "LNB" shall mean commercially available combustion
22 23	modification NO _x controls that minimize NO _x formation by introducing fuel and its
24	associated combustion air into a kiln such that initial combustion occurs in a fuel-ric
25	
26	(i.e., oxygen deficient) environment and introduces additional air to achieve a final
27	fuel-lean (i.e., oxygen rich) environment to complete the combustion process;
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1	w. "Malfunction" shall mean any sudden, infrequent, and not reasonably preventable
2	failure of air pollution control equipment, process equipment, or a process to operate
3	in a normal or usual manner. Failures that are caused in part by poor maintenance or
4	careless operation are not malfunctions;
5	carcless operation are not manufectoris,
6	x. "National Ambient Air Quality Standards" or "NAAQS" shall mean national ambient
7	air quality standards that are promulgated pursuant to Section 109 of the Act, 42
8	U.S.C. § 7409;
9	y. "New Source Performance Standards" or "NSPS" shall mean those standards and
10	
11	emission limitations applicable to the emissions of NOx, and SO2, from existing,
12	modified or reconstructed Portland cement manufacturing facilities, codified at 40
13	C.F.R. Part 60, Subpart F;
14	z. "NOx" shall mean oxides of nitrogen, measured in accordance with the provisions of
15	this Consent Decree;
16	uns consent Deeree,
17	aa. "Operating Day" shall mean any day in which Kiln Operation has occurred;
18	bb. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic
19	numeral;
20	cc. "Parties" shall mean the United States and Nevada Cement Company;
21	ee. Farties shan mean the Officed States and Nevada Cement Company,
22	dd. "PSD" shall mean the Prevention of Significant Deterioration program within the
23	meaning of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, 40 C.F.R. Part
24	52, and Nevada's State Implementation Plan implementing the PSD requirements;
25	ee. "Retire" or "Retirement" shall mean, with respect to any Kiln, (1) to permanently
26	
27	Shutdown the Kiln; and (2) to comply with applicable State and federal requirements
28	for permanent cessation of Kiln operations, including submitting an application in 11
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1	accordance with the Nevada SIP to remove permanently any legal authorization under
2	applicable regulations or permits for further operation of the Kiln;
3	ff. "Section" shall mean a portion of this Consent Decree identified by a Roman
4	numeral;
5	
6	gg. "Selective Non-Catalytic Reduction" or "SNCR" shall mean a pollution control
7	system that injects an ammonia-based reagent into the gas stream without the use of a
8	catalyst for the purpose of reducing NO _x emissions;
9	hh. "Shutdown" shall mean the cessation of Kiln Operation. Shutdown begins when feed
11	to the Kiln is halted and ends when continuous Kiln rotation ceases;
12	ii. "SNCR Demonstration Period" shall mean that period of time identified in Appendix
13	A, following optimization, and at the conclusion of which, Defendant will propose a
14	30-Day Rolling Average Emission Limit for NOx for each Kiln that is achievable
15	through the implementation of SNCR, and that will be applied in accordance with
16 17	Section V (NOx Control Technology, Emission Limits, and Monitoring
18	Requirements) of this Consent Decree;
19	jj. "SO2" shall mean the pollutant sulfur dioxide, measured in accordance with the
20	provisions of this Consent Decree;
21	kk. "Stack Ammonia" shall mean the concentration of ammonia in emissions from the
22	
23	Defendant's Kilns as measured by the Ammonia CEMS during the period when an
24	SNCR is operational for that Kiln. Stack Ammonia is not, without subtraction of
25	Baseline Ammonia, considered Ammonia Slip;
26	ll. "Startup" shall mean the time from when a Shutdown Kiln turns on the induced draft
27	
28	fan and begins firing fuel in the main burner. Startup ends when feed is being 12
11	

1	continuously introduced into the Kiln for at least 120 minutes or when the feed rate
2	exceeds 60 percent of the Kiln design limitation rate, whichever occurs first;
3	mm. "State" shall mean the State of Nevada, and any agencies or subdivisions having
4	jurisdiction over the Facility, including the Nevada Division of Environmental
5	Protection ("NDEP");
6 7	nn. "Temporary Cessation," "Temporary Cessation of Kiln Operation" or "Temporarily
8	
9	Cease Kiln Operation" shall mean the period when a Kiln is not in a state of Kiln
10	Operation and Defendant has provided the required notice pursuant to Paragraph 35
11	of Section VIII (Temporary Cessation of Kiln Operation) of this Consent Decree;
12	oo. "Ton" or "Tons" shall mean short ton or short tons;
13	pp. "United States" shall mean the United States of America, acting on behalf of U.S.
14	EPA; and
15	qq. "U.S. EPA" shall mean the United States Environmental Protection Agency and any
16	of its successor departments or agencies.
17	
18	SECTION IV: CIVIL PENALTY
19	9. Within thirty (30) Days after the Effective Date of this Consent Decree,
20	Defendant shall pay to the United States as a civil penalty the sum of \$550,000,
21	together with interest accruing from the date that the Consent Decree is lodged with
22 23	the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.
24	Defendant shall pay the civil penalty due under this Paragraph 9 by FedWire
25	
26	Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance
27	with written instructions to be provided to Defendant following lodging of the
28	Consent Decree by the Financial Litigation Unit of the U.S. Attorney's Office for the 13

1	District of Nevada, 333 Las Vegas Blvd, Suite 5000, Las Vegas, Nevada, 89101. At
2	the time of payment, Defendant shall send a copy of the EFT authorization form and
3	the EFT transaction record, together with a transmittal letter, which shall state that the
4	payment is for the civil penalty owed pursuant to the Consent Decree in United States
5	v. Nevada Cement Company, and shall reference the civil action number and DOJ
6	
7	case number 90-5-2-1-10458, to the United States in accordance with Section XIX of
8	this Consent Decree (Notices); by email to acctsreceivable.CINWD@epa.gov; and to:
9	U.S. EPA Cincinnati Finance Office
10 11	26 Martin Luther King Drive Cincinnati, Ohio 45268.
12	
13	10. Defendant shall not deduct any penalties paid under this Section or
14	Section XIII (Stipulated Penalties) in calculating its federal or state or local income
15	tax.
16	SECTION V: NOx CONTROL TECHNOLOGY, EMISSION LIMITS AND
17	MONITORING REQUIREMENTS
18	A. NOx Control Technology and Emission Limits
19	11. Defendant shall install and Continuously Operate SNCR Control
20	Technology on each Kiln to reduce NOx emissions in accordance with the timeframes
21	and requirements set forth in Section III of Appendix A.
22	12. Defendant shall comply with all terms and conditions, including drafting
23	
24	submittals and complying with protocols set forth in Appendix A, to establish 30-Day
25	Rolling Average Emission Limits for NOx applicable to each Kiln.
26	13. Within 30 Days after approval, conditional approval, or partial approval
27	by U.S. EPA pursuant to Section XI (Review and Approval of Submittals) of any
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final 30-Day Rolling Average Emission Limit for NO_x established pursuant to Appendix A, Defendant shall achieve and maintain continuous compliance with such 30-Day Rolling Average Emission Limit for NO_x If the 30-day Rolling Average Emission Limit for NO_x is challenged pursuant to the Dispute Resolution provisions of Section XV (Dispute Resolution), the final NO_x Limit shall be the 30-Day Rolling Average agreed to by the Parties at the conclusion of Informal Dispute Resolution. If Informal Dispute Resolution does not resolve the dispute, Defendant shall comply with its Proposed final NO_x Emissions Limit until a final NO_x Emissions Limit is determined by the Court.

14. If the final 30-Day Rolling Average Emission Limit for NO_x as determined in Appendix A.IV.7.d is less than a 40% reduction in Baseline NO_x Emissions of the applicable Kiln, the United States may demand that Defendant install a Low NO_x Burner on such Kiln. The United States will make this demand within 180 days of receipt of the Demonstration Report.

15. If the United States demands that Defendant install a Low NO_x Burner on either Kiln pursuant to Paragraph 14, Defendant shall install a Low NO_x Burner within 24 months of such demand and comply with Appendix A, Section V of this Consent Decree. Following the installation of a Low NO_x Burner on a Kiln, the Defendant shall commence complying with the terms of Appendix A, Section V to establish a new 30-Day Rolling Average Emissions Limit applicable to such Kiln while operating Low NO_x Burner and SNCR.

16. Upon submittal to EPA as part of a SNCR Demonstration Report of a proposed 30 Day Rolling Average Emission Limit for NO_x for a particular Kiln pursuant to Appendix A, Defendant shall meet the proposed Limit for that Kiln until such time as final 30-Day Rolling Average Limit is established pursuant to Paragraph 13.

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NOx and Ammonia Continuous Emission Monitoring Systems

17. By no later than December 31, 2017, Defendant shall install and make operational a NO_x CEMS and an Ammonia CEMS at the stack of Kiln #2 in accordance with the requirements of Appendix A.

a. On or before the date that a NO_x CEMS and an Ammonia CEMS is required pursuant to Paragraph 17, Defendant shall begin to record on a continuous basis the daily clinker production rates by continuously meeting the requirements of 40 C.F.R. § 63.1350(d) to determine hourly clinker production rates.

18. Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS required pursuant to Paragraphs 17 and 19 shall be operated at all times during Kiln Operation. Such CEMS shall be used to demonstrate compliance with the 30-Day Rolling Average Emission Limit for NO_x established in Section V.A (NO_x Control Technology and Emission Limits) and Appendix A of this Consent Decree.

19. By February 1, 2018, Defendant shall complete installation of a single stack for Kiln #1, install and make operational a NO_x CEMS and an Ammonia CEMS at the stack and start collecting the same production data as Paragraph 17.a.

20. Each NO_x CEMS required by this Consent Decree along with associated flow monitors and weight meters shall monitor and record the applicable NO_x emission rate from each Kiln stack in units of lbs. of NO_x per Ton of clinker produced

11		be installed, certified, calibrated, maintained, and operated in
1	at the Kiln and shall t	or instance, continee, canonated, maintained, and operated in
2	accordance with the r	equirements of 40 C.F.R. Part 60, Appendices B and F. The
3	Ammonia CEMS sha	Il be installed and operated in a manner that meets the
4		.F.R. Part 60, Appendices B and F, and CTM 027.
5		
6		ses of this Consent Decree, all emissions of NO _x from the Kiln
7	shall be measured by	the NO_x CEMS. During any time when CEMS are inoperable
8	and otherwise not me	asuring emission of NO_x from either Kiln, Defendant shall app
0	the missing data subs	titution procedures in 40 C.F.R. Part 75, Subpart D.
1	SECTION VI: SO2 EMIS	SION LIMITS AND MONITORING REQUIREMENTS
2	A. SO ₂ Emission Li	mits
3	22. By the dat	tes set forth below in Paragraphs 23 and 24, Defendant shall
4		
	achieve and maintain	continuous compliance with the 30-Day Rolling Average
4	achieve and maintain	
4	achieve and maintain	continuous compliance with the 30-Day Rolling Average
4 5 6	achieve and maintain	continuous compliance with the 30-Day Rolling Average O_2 set forth in Table 1:
4 5 6 7 8 9	achieve and maintain	continuous compliance with the 30-Day Rolling Average O_2 set forth in Table 1:
4 5 6 7 8	achieve and maintain Emission Limit for S	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: <u>TABLE 1</u> <u>30-Day Rolling Average Emission Limit for SO₂</u>
4 5 6 7 8 9 20 21 22	achieve and maintain Emission Limit for So Kiln	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: <u>TABLE 1</u> <u>30-Day Rolling Average Emission Limit for SO₂ (lbs. SO₂/Ton of clinker)</u>
4 5 6 7 8 9 20 21	achieve and maintain Emission Limit for So Kiln Kiln #1 Kiln #2	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: <u>TABLE 1</u> <u>30-Day Rolling Average Emission Limit for SO₂ (lbs. SO₂/Ton of clinker) 1.1 lbs SO₂/ Ton of clinker 1.1 lbs SO₂/ Ton of clinker</u>
4 5 6 7 8 9 20 21 22 23	achieve and maintain Emission Limit for So Kiln Kiln #1 Kiln #2 B. SO ₂ Cont	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: <u>TABLE 1</u> <u>30-Day Rolling Average Emission Limit for SO₂ (lbs. SO₂/Ton of clinker) 1.1 lbs SO₂/ Ton of clinker 1.1 lbs SO₂/ Ton of clinker</u>
4 5 6 7 8 9 20 21 22 23 24	achieve and maintain Emission Limit for So Kiln Kiln #1 Kiln #2 B. SO ₂ Cont 23. By no late	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: TABLE 1 30-Day Rolling Average Emission Limit for SO ₂ (lbs. SO ₂ /Ton of clinker) 1.1 lbs SO ₂ / Ton of clinker 1.1 lbs SO ₂ / Ton of clinker inuous Emission Monitoring Systems ar than December 31, 2017, Defendant shall install and make
4 5 6 7 8 9 20 21 22 23 24 25	achieve and maintain Emission Limit for So Kiln Kiln #1 Kiln #2 B. SO ₂ Cont 23. By no late	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: <u>TABLE 1</u> <u>30-Day Rolling Average Emission Limit for SO₂ (lbs. SO₂/Ton of clinker) 1.1 lbs SO₂/ Ton of clinker 1.1 lbs SO₂/ Ton of clinker</u>
4 5 6 7 8 9 20 21 22 23 24 25 26	achieve and maintain Emission Limit for So Kiln Kiln #1 Kiln #2 B. SO ₂ Cont 23. By no late	continuous compliance with the 30-Day Rolling Average O ₂ set forth in Table 1: TABLE 1 30-Day Rolling Average Emission Limit for SO ₂ (lbs. SO ₂ /Ton of clinker) 1.1 lbs SO ₂ / Ton of clinker 1.1 lbs SO ₂ / Ton of clinker inuous Emission Monitoring Systems ar than December 31, 2017, Defendant shall install and make

24. No later than February 1, 2018, Defendant shall install and make operational an SO₂ CEMS at the stack of Kiln #1.

25. Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the SO₂ CEMS required pursuant to Paragraphs 23 and 24 shall be operated at all times during Kiln Operation. Each such SO₂ CEMS shall be used at each Kiln to demonstrate compliance with the 30-Day Rolling Average Emission Limit for SO₂ established in Section VI.A (SO₂ Emission Limits) of this Consent Decree.

26. Each SO₂ CEMS required for this Consent Decree, along with associated flow monitor and weight meters, shall monitor and record the applicable SO₂ emission rate from each Kiln stack in units of lb of SO₂ per Ton of clinker produced at each Kiln and shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 C.F.R. Part 60.

27. For purposes of this Consent Decree, all emissions of SO₂ from the Kilns shall be measured by SO₂ CEMS. During any time when the CEMS are inoperable and otherwise not measuring emissions of SO₂ from any Kiln, Defendant shall apply the missing data substitution procedures in 40 C.F.R. Part 75, Subpart D.

SECTION VII: OTHER INJUNCTIVE RELIEF

Good Pollution Control Practices

28. At all times, Defendant shall maintain and operate the Kilns, including all associated air pollution control equipment, in a manner consistent with good air pollution control practice.

Mitigation

29. Within two years of the Date of Entry of this Consent Decree, Defendant shall replace an existing heavy-duty diesel truck and an existing rail car mover that are identified in Appendix B of this Consent Decree with a new diesel truck and a new rail car mover with required emissions controls, as described more fully in Appendix B (the "Projects"). Defendant shall spend no less than \$420,000 for the Projects ("Project Dollars").
30. Defendant, shall maintain, and, within 30 Days upon U.S. EPA's request, provide to U.S. EPA all documents that substantiate work completed on the Projects in accordance with Section XIX (Notices).
31. Defendant certifies that Defendant is not otherwise required by law to perform the Projects, that Defendant is unaware of any other person who is required by law to perform the Projects, and that Defendant will not use the Projects, or portion thereof, to satisfy any obligations that it may have under other applicable

requirements of law. Defendant certifies that it has not, and will not, deduct any costs in implementing Section VII (Other Injunctive Relief), in calculating its federal or state income taxes.

32. Beginning six (6) months after the Effective Date of this Consent Decree, and continuing until completion of the Projects, Defendant shall provide U.S. EPA with semi-annual or annual updates concerning the progress of the Projects in the semi-annual or annual reports required (as applicable) in Section XII (Reporting Requirements) of this Consent Decree.

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33. Defendant shall use good faith efforts to secure as much environmental benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree. Within sixty (60) Days following the completion of the Projects required under this Consent Decree, Defendant shall submit to U.S. EPA a report that documents the date that the Projects were completed, Defendant's results from implementing the Projects, including the emission reductions or other environmental benefits achieved (including any emission reductions achieved for NO_x, or SO₂), and the Project Dollars expended by Defendant in implementing the Projects.

34. In connection with any communication to the public or to shareholders regarding Defendant's actions or expenditures relating in any way to the Projects, Defendant shall include prominently in the communication the information that the actions and expenditures were required as part of a negotiated consent decree to resolve allegations that Defendant violated the Clean Air Act.

SECTION VIII: TEMPORARY CESSATION OF KILN OPERATION

35. If Defendant has Temporarily Ceased Kiln Operation of any Kiln on the date by which Defendant is required to install and/or Continuously Operate any Control Technology at that Kiln under Section V (NO_x Control Technology, Emission Limits, and Monitoring Requirements), or Section VI (SO₂ Emission Limits and Monitoring Requirements), Defendant shall provide written notice to U.S. EPA within ten (10) Days after such Temporary Cessation began, specifying the date on which such period of Temporary Cessation began. Defendant shall provide such written notice pursuant to Section XIX (Notices).

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36. If Defendant has provided the written notice as required in Paragraph 35, above, Defendant shall not be required to install and Continuously Operate the Control Technology at that Kiln by the dates required in Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements) and Section VI (SO2 Emission Limits and Monitoring Requirements) of this Consent Decree with respect to that Kiln. However, Defendant shall not recommence Kiln Operation after the dates required in Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements) of this Consent Decree with respect to that Kiln unless the Defendant has: 1) installed and Commenced Continuous Operation of the Control Technologies required by this Consent Decree for that Kiln; 2) commenced compliance with all requirements for that Kiln contained in Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements) and Section VI (SO2 Emission Limits and Monitoring Requirements); and 3) provided written notice to U.S. EPA within 30 Days after recommencing Kiln Operation. If Defendant recommences Kiln Operation without installing and Commencing Continuous Operation of the Control Technology required under this Consent Decree and does not demonstrate compliance with all requirements for that Kiln contained in Section V (NO_x Control Technology, Emission Limits, and Monitoring Requirements) and Section VI (SO₂ Emission Limits and Monitoring Requirements), Defendant shall be liable for stipulated penalties pursuant to Section XIII (Stipulated Penalties).

SECTION IX: PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

37. Except as specifically stated to the contrary in this Consent Decree, NO_x and SO₂ emission reductions resulting from compliance with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Non-attainment NSR and PSD programs.

38. The limitations on the generation and use of netting credits or offsets set forth in Paragraph 37 do not apply to emission reductions achieved by Defendant that are surplus to those required under this Consent Decree ("surplus emission reductions"). For purposes of this Paragraph, surplus emission reductions are the reductions over and above those required under this Consent Decree, including any final 30-Day Rolling Average Emission Limit for NO_x established pursuant to Appendix A, that result from Defendant's compliance with federally enforceable emissions limits that are more stringent than limits imposed under this Consent Decree or from Defendant's compliance with emissions limits otherwise required under applicable provisions of the Clean Air Act or with an applicable SIP that contains more stringent limits than those imposed under this Consent Decree.

39. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by U.S. EPA or a State as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increments, or air quality-related values, or for demonstrating reasonable progress under the regional haze program of the Clean Air Act pursuant to 42 U.S.C. §§ 7491-92.

SECTION X: PERMITS

40. Where any compliance obligation under this Consent Decree requires Defendant to obtain a federal, State, or local permit or approval, Defendant shall submit a timely and complete application for such permit or approval and take all other actions necessary to obtain all such permits or approvals, allowing for all legally required processing and review including requests for additional information by the permitting or approval authority. The inability of Defendant to obtain a permit in adequate time to allow compliance with the deadlines stated in this Consent Decree may be considered a Force Majeure event if Defendant demonstrates that it exercised best efforts to timely fulfill its permitting obligations and has otherwise satisfied the requirements of Section XIV (Force Majeure) of this Consent Decree. If, after demonstrating compliance with the requirements of this Paragraph, Defendant determines that it is unable to timely obtain a permit or approval necessary to install and Continuously Operate Control Technology under this Consent Decree, then Defendant shall within 10 days notify EPA in writing pursuant to Section XIV (Force Majeure) of this Consent Decree and shall request an extension of time necessary to obtain such permit or approval and install and shake down the required improvements. If EPA determines that Defendant's inability to timely obtain any such required permit or approval is a Force Majeure event, then the provisions of Paragraph 67 shall apply to extend the deadline for installation and commencement of

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Continuous Operation of the Control Technology and for achieving and maintaining compliance with the applicable 30-Day Rolling Average Emission Limits.

41. In addition to having first obtained any required preconstruction permits or other approvals pursuant to Paragraph 40, within 3 months after the establishment of the final 30-Day Rolling Average Emission Limit for NOx established pursuant to Section V (NOx Control Technology, Emissions Limits and Monitoring Requirements), including Final Dispute Resolution if applicable, Defendant shall apply to NDEP to include the applicable requirements of Sections V.A (NOx Control Technology and Emission Limits) and VI.A (SO₂ Emission Limits), and any monitoring requirements, including those in Sections V.B (NOx Continuous Emission Monitoring System) and VI.B (SO₂ Continuous Emission Monitoring Systems) of this Consent Decree in a federally enforceable operating permit or other permit or approval issued under the SIP of Nevada and under authority independent of the NDEP's authority to issue Title V permits. For the purpose of this Paragraph, the ammonia monitoring requirements identified in Section V do not constitute NOx monitoring requirements. Following submission of the application for the permit or approval, Defendant shall cooperate with NDEP by promptly submitting all information that such permitting authority seeks following its receipt of the application for the permit. The methods specified in this Consent Decree for demonstrating compliance with the limits in this Consent Decree are not intended to change the means by which Defendant demonstrates compliance with standards not addressed by this Consent Decree. The requirements of this Paragraph are satisfied if a preconstruction permit was obtained, that permit serves as a state operating permit

under the Nevada SIP and that permit contains the elements identified in this Paragraph.

42. Upon issuance of any permit or approval required under Paragraphs 40
and 41, Defendant shall file any applications necessary to incorporate the
requirements of that permit into the Title V operating permit of the Facility.
Defendant shall not challenge the inclusion in any such permit of the Emission Limits
expressly prescribed in this Consent Decree (including, where applicable, 30-Day
Rolling Average Emission Limits for NO_x determined in accordance with Appendix
A) or of any other requirement of this Consent Decree.

43. For each Kiln, Defendant shall provide U.S. EPA with a copy of each application for a permit to address or comply with any provision of this Consent Decree, as well as a copy of any permit proposed as a result of such application, to allow for timely U.S. EPA participation in any public comment opportunity.

44. In lieu of incorporating the terms of the Consent Decree directly into a permit issued under a SIP pursuant to Paragraph 41, Defendant may request that NDEP submit the portions of the Consent Decree applicable to the Facility in Nevada to the U.S. EPA for approval under the State's SIP in accordance with 42 U.S.C. § 7410(k). Upon approval by the U.S. EPA, those portions of this Consent Decree will be incorporated into the Nevada SIP, and subsequently incorporated into Title V permits for the Facility consistent with applicable requirements in 40 C.F.R. Part 70 or Nevada-specific rules adopted and approved consistent with Part 70. Defendant agrees not to contest the submittal of any such proposed SIP revision that incorporates the terms of this Consent Decree to U.S. EPA, or U.S. EPA's approval

of such submittal, or the incorporation of the applicable portions of this Consent Decree through these SIP requirements into the Title V permits.

SECTION XI: REVIEW AND APPROVAL OF SUBMITTALS

45. After review of any plan, report, or other document that is required to be submitted pursuant to this Consent Decree, U.S. EPA, shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.

46. If the submission is approved pursuant to Paragraph 45, Defendant shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 45.b or c, Defendant shall, upon written direction of U.S. EPA, take all actions required by the approved plan, report, or other item that U.S. EPA determines are technically severable from any disapproved portions, subject to Defendant's right to dispute the specified conditions or the disapproved portions, under Section XV (Dispute Resolution) of this Consent Decree and the severability of such portions.

47. If the submission is disapproved in whole or in part pursuant to Paragraph
45.c or d, Defendant shall, within 45 Days or such other time as the Parties agree to in
writing, correct all deficiencies and resubmit the plan, report, or other item, or
disapproved portion thereof, for approval, in accordance with the preceding
Paragraphs. If the resubmission is approved in whole or in part, Defendant shall
proceed in accordance with the preceding Paragraph.

48. Any stipulated penalties applicable to an original submission that is disapproved in whole or in part pursuant to Paragraph 45.c or d, as provided in Section XIII (Stipulated Penalties) of this decree, shall continue to accrue during the period specified in Paragraph 47, but any stipulated penalties that accrue following the receipt of the submission shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendant's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

49. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, U.S. EPA may again require Defendant to correct any deficiencies in accordance with the preceding Paragraphs, or may itself correct any deficiencies and seek stipulated penalties, subject to Defendant's right to invoke Dispute Resolution under Section XV (Dispute Resolution) of this Consent Decree.

SECTION XII: REPORTING REQUIREMENTS

50. Within 30 Days after the end of each half calendar year (*i.e.*, June 30,
December 31) after the Effective Date, until termination of this Consent Decree
pursuant to Section XXIII (Termination), Defendant shall submit a semi-annual
report to U.S. EPA for the immediately preceding half calendar year period that shall:
a. Identify any and all dates on which Defendant has installed, or describe the
progress of installation of, each Control Technology required for each Kiln under
Section V (NOx Control Technology, Emission Limits and Monitoring

1	Requirements) and describe any problems encountered or anticipated during such
2	installation, together with implemented or proposed solutions;
3	b. Identify any and all dates on which Defendant has completed installation of, or
4	describe the progress of installation of, each continuous monitoring system
5	required under Section V.B (NOx and Ammonia Continuous Emission Monitoring
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7	Systems) and Section VI.B (SO2 Continuous Emission Monitoring Systems) and
8	describe any problems encountered or anticipated during such installation,
9	together with implemented or proposed solutions;
11	c. Provide, in electronic format able to be manipulated with Microsoft Excel, all
12	CEMS data collected for each Kiln, reduced to 1 hour averages, in accordance
13	with 40 C.F.R. § 60.13(h)(2), including an explanation of any periods of CEMS
14	downtime together with any missing data for which Defendant applied missing
15 16	data substitution procedures, under Section V.B (NOx and Ammonia Continuous
17	Emission Monitoring Systems) or Section VI.B (SO2 Continuous Emission
18	Monitoring Systems);
19	d. Demonstrate compliance with all applicable 30-Day Rolling Average Emission
20	Limits of this Consent Decree;
21	e. Provide a complete description and status of all actions Defendant has undertaken
22	to comply with each of the Appendices of this Consent Decree;
24	f. Describe the status of permit applications and any proposed SIP revisions made to
25	implement the requirements of this Consent Decree; and
26	g. Describe the status of any operation and maintenance work relating to activities
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28	required under this Consent Decree. 28

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The semi-annual report shall also include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the likely cause of non-compliance and of the remedial steps taken, or to be taken, to prevent or minimize such non-compliance.

51. If Defendant violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Defendant shall notify the United States of such violation and its likely duration, in writing (including by email), within ten (10) Business Days of the Day Defendant first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation and to mitigate any adverse effects of such violation. Defendant shall investigate the cause of the violation and shall then submit an amendment to the report required under Paragraph 50, including a full explanation of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section XIV (Force Majeure) of this Consent Decree or to avail itself of Section XIV (Force Majeure) if Defendant contends a Force Majeure event occurred.

52. Whenever any violation of this Consent Decree, or of any applicable permits required under this Consent Decree, or any other event affecting Defendant's performance under this Consent Decree, or the performance of the Kilns, may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify U.S. EPA, orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew, or should have known, of the

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1	violation or event. This procedure is in addition to the requirements set forth in the
2	preceding Paragraph.
3	53. All reports shall be submitted to the persons designated in Section XIX
4	(Notices) of this Consent Decree.
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6	54. Each report submitted by Defendant under this Section or Appendix A or
7	Appendix B shall be signed by an official of the submitting party and include the
8	following certification:
9	I certify under penalty of law that this document and all attachments
0	were prepared under my direction or supervision in accordance with
11	a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the
12	person or persons who manage the system, or those persons directly
3	responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and
4	complete. I am aware that there are significant penalties for
5	submitting false information, including the possibility of fine and imprisonment for knowing violations.
6	This certification requirement does not apply to emergency or similar notifications where
7	compliance would be impractical. Failure to certify as immediately above is a violation of the
18	Consent Decree and is subject to stipulated penalties.
20	55. The reporting requirements of this Consent Decree do not relieve
21	Defendant of any reporting obligations required by the Clean Air Act or
2	implementing regulations, or by any other federal, State, or local law, regulation,
3	permit, or other requirement.
4	permit, of other requirement.
25	56. Any information provided pursuant to this Consent Decree may be used
26	by the United States in any proceeding to enforce the provisions of this Consent
27	Decree and as otherwise permitted by law.
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SECTION XIII: STIPULATED PENALTIES

57. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified in Table 2 below, unless excused under Section XIV (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree. Once the final NOx emission limit is established pursuant to Appendix A, the parameters used to establish the final NOx emission limit shall not be enforceable or subject to stipulated penalties. Violation of an Emission Limit that is based on a 30-Day Rolling Average is a violation on every Day on which the average is based. Each subsequent Day of violation after a violation of a 30-Day Rolling Average Emission Limit is subject to the corresponding penalty per Day specified in Table 2, below. Where a violation of a 30-Day Rolling Average Emission Limit (for the same pollutant and from the same source) recurs within periods of less than thirty (30) Days, Defendant shall not pay a daily stipulated penalty for any Day of recurrence for which a stipulated penalty is already payable. Stipulated penalties may only be assessed once for a given Day within any averaging period for violation of any particular Emission Limit. Stipulated penalties for consecutive periods of violation of an Emission Limit shall be calculated based upon the violation of the Emission Limit for the same pollutant from the same Kiln.

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Consent Dec	ree Violation	Stipulated Penalty
a.	Failure to pay the civil penalty in the manner specified in Section IV (Civil Penalty) of this Consent Decree	\$7,500 for each Day
b.	Failure to comply with a 30-Day Rolling Average Emission Limit for NO_x or SO_2 where the emissions are less than 5% in excess of the limits set forth in this Consent Decree	\$1,000 for each Operating Day during any 30-Day rolling period where the violation is less than 5% in excess of the Limit
c.	Failure to comply with a 30-Day Rolling Average Emission Limit for NO_x or SO_2 where the emissions are equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$2,000 for each Operating Day during any 30-Day rolling period where the violation is equal to or greater than 5% but less than 10% in excess of the Limit
d.	Failure to comply with a 30-Day Rolling Average Emission Limit for NO_x or SO_2 where the emissions are equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$4,000 for each Operating Day during any 30-Day rolling period where the violation is equal to or greater than 10% in excess of the Limit
e.	Failure to install or Commence Continuous Operation or Continuously Operate Control Technology at a Kiln required by the deadlines established in Section V (NO _x Control Technology, Emission Limits and Monitoring Requirements) and/or Appendix A of this Consent Decree	\$5,000 for each consecutive Operating Day during the first 20 Days, \$ 10,000 for each consecutive Operating Day for the next 40 Days, and \$32,500 for each consecutive Operating Day thereafter
f.		\$1,000 for each Operating Day for each such failure per Kiln

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Consent Dec	ree Violation	Stipulated Penalty
g.	Failure to apply for any permit or permit amendment or seek a SIP approval required by Section X (Permits) or provide a timely copy to USEPA	\$1,000 for each Day for each such failure
h.	Failure to timely submit, modify, or implement, as approved, any report, plan, study, analysis, protocol, or other submittal required by this Consent Decree, including electronic versions as required, including those submissions approved pursuant to Section XI (Review and Approval of Submittals) of this Consent Decree	For each separate failure, \$750 for each Day during the first 10 Days, \$1,000 per Day thereafter
i,	Failure to provide new owner or operator of the Facility a copy of this Consent Decree in accordance with Paragraph 4	\$1,000 for each Day for each such failure
j.	Failure to provide certifications, progress reports, updates and/or a final report per the schedule in Paragraphs 50, 51, and 52	\$1,000 per Day for each Day late per project
k,	Failure to maintain or instruct Contractors to maintain documents, records or other information that relate in any manner to performance of obligations in the Consent Decree, as per Paragraph 84	\$1,000 for each record or Day of data not collected or maintained as required
1.	Any other violation of the Consent Decree	\$1,000 for each Day for each violation
		aph 57 above, stipulated penalties under
th	s Section shall begin to accrue on the Day a	after performance is due or on the Day a
vi	plation occurs, whichever is applicable, and	shall continue to accrue until
pe	rformance is satisfactorily completed or un	til the violation ceases. Stipulated
pe	nalties shall accrue simultaneously for sepa	rate violations of this Consent Decree
bu	t each separate violation shall be subject to 33	no more than one stipulated penalty. A

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stipulated penalties are subject to challenge by Defendant pursuant to Section XIV (Force Majeure).

59. Defendant shall pay any stipulated penalty within thirty (30) Days of receiving the United States' written demand.

60. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due the United States under this Consent Decree.

61. Stipulated penalties shall accrue as provided in this Section, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement between the Parties or by a decision of the United States that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest accruing from the 31st Day after the written demand in Paragraph 59, within 30 Days of the effective date of the agreement or the receipt of U.S. EPA's decision or order.

b. If the dispute is appealed to the Court and the United States is the prevailing party, in whole or in part, as may be determined by the Court, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest accruing from the 31st Day after the written demand in Paragraph 59, within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph c below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest accruing from the 31st Day after the written demand in Paragraph 59, within 15 Days of receiving the final appellate court decision.

62. Defendant shall pay stipulated penalties owing to the United States in the manner set forth in Paragraph 9 and with the confirmation notices to the persons specified in Paragraph 95, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

63. The United States may choose between (1) stipulated penalties and (2) any other right, remedy or sanction available to it, but not both. The payment of penalties and interest, if any, shall not alter in any way Defendant's obligation to complete the performance of the requirements of this Consent Decree. This Paragraph shall not limit the United States' ability to seek injunctive relief associated with such violations.

64. Defendant shall not deduct stipulated penalties paid under this Section in calculating their federal, state or local income tax.

65. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from securing any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

66. Subject to the provisions of Section XVII (Effect of Settlement/Reservation of Rights) of this Consent Decree, the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Air Act, Defendant shall be allowed a dollar-for-dollar credit, for any stipulated penalties paid, against any statutory penalties imposed for such violations.

SECTION XIV: FORCE MAJEURE

67. "Force Majeure" (for purposes of this Consent Decree) is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant or Defendant's Contractors, that causes a delay or impediment to performance in complying with any obligation under this Consent Decree despite the Defendant's best efforts to fulfill the obligation. The requirement that the Defendant exercise best efforts to fulfill the obligation includes using best efforts to anticipate any potential Force Majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay and the effects of such event to the greatest extent possible. Force Majeure does not include the Defendant's financial inability to perform any obligation under this Consent Decree. Force Majeure may include Defendant's inability after demonstrating compliance with the requirements of Paragraphs 40 and 41 to obtain a permit or approval such that there is adequate time to install and Continuously Operate Control Technology required under this Consent Decree.

68. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a Force Majeure event, Defendant shall provide written notice or notice by electronic mail (email) to the representatives of U.S. EPA designated to receive notice pursuant to Section XIX

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(Notices) within seven (7) Business Days of when Defendant first knew that the event might cause a delay. Within 21 Days thereafter, Defendant shall provide in writing to U.S. EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendant's rationale for attributing such delay to a Force Majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay was attributable to a Force Majeure. Failure to comply with the above requirements shall preclude Defendant from asserting any claim of Force Majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Defendant shall be deemed to know of any circumstance of which Defendant. any entity controlled by Defendant, or Defendant's Contractors knew or should have known.

69. If U.S. EPA agrees that the delay or anticipated delay is attributable to a Force Majeure event, the time for performance of the obligations under this Consent Decree that are affected by the Force Majeure event will be extended by U.S. EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the Force Majeure event shall not, of itself, extend the time for performance of any other obligation. U.S. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the Force Majeure event.

70. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, U.S. EPA will notify Defendant in writing of its decision.

71. If Defendant elects to invoke the dispute resolution procedures set forth in Section XV (Dispute Resolution), it shall do so no later than 15 Days after receipt of U.S. EPA's notice. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a Force Majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 67 and 68, above. If Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to U.S. EPA and the Court.

SECTION XV: DISPUTE RESOLUTION

72. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States or Affected State to enforce any obligation of Defendant arising under this Consent Decree.

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73. Informal Dispute Resolution for Emission Limit Setting Process under Appendix A. If Defendant invokes Dispute Resolution regarding an EPA-established alternative final 30-Day Rolling Average Emission Limit for NOx, Defendant shall promptly (within 15 days) initiate the process set forth in this Paragraph to hire an independent Contractor who will be tasked to analyze the 30-Day Rolling Average Emission Limits for NOx established by EPA and proposed by Defendant and to provide, for the benefit of both U.S. EPA and Defendant, the reports, analysis, and services identified in this Paragraph, below, by the specified deadlines. Defendant shall bear all costs associated with the Contractor's work up to \$100,000, and shall provide the Contractor access to records, employees, contracts, and facilities which are reasonably necessary to complete the report required by this Paragraph. If costs to perform the work set forth in the Scope of Work (SOW) requirements described in this Paragraph are expected to be higher than \$100,000, Defendant and U.S. EPA will, upon written mutual agreement, limit or modify the nature and/or scope of the work to be performed under this Paragraph to meet the expenditure limitation. For purposes of this Paragraph, "independent" shall mean a qualified professional with at least 5 years of experience relating to the operations of and/or emissions from cement kilns or similar sources and who has not previously been employed or retained by Defendant in any capacity (unless otherwise approved by U.S. EPA).

a. Defendant shall submit to U.S. EPA for approval, the name and qualifications of a proposed Contractor for this engagement at the time it submits its Written Notice of Dispute in accordance with Section XIX (Notices). If U.S. EPA disapproves of the Contractor, Defendant is required to propose to U.S. EPA within 15 Days of

1	the disapproval a different Contractor, also subject to U.S. EPA's approval. If
2	U.S. EPA disapproves the second Contractor, U.S. EPA may choose and identify
3	to Defendant the Contractor to be employed. Defendant shall enter into a contract
4	with the Contractor, containing the SOW requirements in Paragraph 73.b, below
5	· 이상 방법은 영상 이상 이상 이상 방법을 위한 것이 있는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있다.
6	(as modified to meet the expenditure limitations), within 14 Days of U.S. EPA's
7	approval or final identification of the Contractor.
8	b. As part of the contract, Defendant shall provide to the Contractor a SOW which
9	will include a requirement or direction to:
10	i. Analyze all the data collected under Appendix A, as well as the
11	Demonstration Report, and proposed 30-Day Rolling Average Emission
12	
13	Limits for NO _x ;
14	ii. Submit to U.S. EPA and Defendant, a report on the appropriate 30-day
16	rolling average emission limit, consistent with the methodology set forth
17	in and information collected through Appendix A, as applicable, based
18	upon the injection rates and the operational parameters approved as part of
19	the SNCR Design Reports and the SNCR Optimization Reports required
20	by Appendix A, as applicable. The conclusions of this report shall be
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22	based on all of the information and data collected during the SNCR
23	Optimization and Demonstration Periods, as applicable, as well as any
24	additional site-specific information available to the Contractor. The report
25	shall include a section on whether the data collected during the
26	Demonstration Period is representative of normal operations of the unit, as
27	and section would be subliced at a sublimited from the sublimited for the section of the sublimited for
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1	well as a recommended final 30-Day Rolling Average Emission Limit for
2	NO _x using the protocol and procedures in Appendix A, as applicable:
3	iii. Make available to U.S. EPA any and all data evaluated, and reveal all
4	
5	communications with Defendant in the course of work pursuant to the
6	SOW. The Contractor shall also be tasked in the SOW to attend up to 15
7	hours of meetings specifically requested by U.S. EPA, to answer questions
8	concerning any analysis or work undertaken pursuant to the SOW.
9	Defendant may attend any such meeting between U.S. EPA and the
10	
11	Contractor. The SOW shall make clear that the Contractor is free to
12	discuss its analysis, findings and the content of their report with U.S. EPA
13	prior to the completion of the report; and
14	iv. Complete the Contractor report within 45 Days from the time of the
15	effective date of the contract.
16	
17	c. The results of the Contractor report will inform the parties in the process of
18	engaging in informal dispute resolution on the proposed and final permit limit.
19	74. If the United States and Defendant are unable to reach agreement on a
20	final 30-Day Rolling Average Emission Limit for NOx within 20 Days after receipt of
21	
22	the Contractor report by EPA referenced in the prior paragraph, Defendant may
23	request formal dispute resolution under Paragraph 76 of this Consent Decree. The
24	Contractor report shall be part of the Dispute Resolution record in any formal dispute
25	proceedings under this Consent Decree.
26	75. Informal Dispute Resolution with Respect to All Other Disputes. Any
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28	dispute subject to Dispute Resolution under this Consent Decree shall first be the
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subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

76. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

77. The United States shall serve its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

78. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIX (Notices) of this

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79. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

80. Standard of Review.

a. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 76 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law or the Consent Decree.

 <u>Other Disputes</u>. Except as otherwise provided in this Consent Decree, in any other dispute brought under Section XV (Dispute Resolution), Defendant shall

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bear the burden of demonstrating that its position complies with this Consent Decree.

3	81. The invocation of dispute resolution procedures under this Section shall
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5	not, by itself, extend, postpone, or affect in any way any obligation of Defendant
6	under this Consent Decree, unless and until final resolution of the dispute so provides.
7	Stipulated penalties with respect to the disputed matter shall continue to accrue from
8	the first Day of noncompliance, but payment shall be stayed pending resolution of the
9	dispute as provided in Paragraph 61. If Defendant does not prevail on the disputed
10	issue, stipulated penalties shall be assessed and paid as provided in Section XIII
11	
12	(Stipulated Penalties).
13	SECTION XVI: INFORMATION COLLECTION AND RETENTION
14	82. The United States and their representatives, including attorneys,
15	contractors, and consultants, shall have the right of entry into the facility covered by
16	
17	this Consent Decree, at all reasonable times, upon presentation of credentials, to:
18	a. monitor the progress of activities required under this Consent Decree;
19	b. verify any data or information submitted to the United States in accordance with
20	the terms of this Consent Decree;
21	a conduct norformance testings
22	c. conduct performance testing;
23	d. obtain documentary evidence, including photographs and similar data; and
24	e. assess Defendant's compliance with this Consent Decree.
25	83. Upon request, Defendant shall provide U.S. EPA and its authorized
26	representatives copies of analytical data from Kiln performance testing performed by
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Defendant. Upon request, U.S. EPA shall provide Defendant copies of analytical data from Kiln performance testing performed by U.S. EPA.

84. Until five years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its Contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its Contractors' or agents' possession or control, or that come into its or its Contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

85. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40
C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

86. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

SECTION XVII: EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

87. <u>Resolution of Liability</u>. Entry of this Consent Decree shall resolve the civil claims of the United States for the violations alleged in the Complaint filed in this action and in the two Notices of Violation (NOVs) issued by the U.S. EPA dated October 5, 2010 and March 12, 2014, through the date the Consent Decree is lodged with the Court.

88. Notwithstanding the resolution of liability in Paragraph 87, nothing in this Consent Decree precludes the United States from seeking from Defendant injunctive relief, penalties, or other appropriate relief for violations by Defendant of the regulatory requirements identified in Paragraph 87 resulting from (1) construction or modification that commenced prior to the Date of Lodging of the Consent Decree, if the resulting violations do not arise from the conduct specifically resolved by Paragraph 87 or do not relate to NO_x, or SO₂ or (2) any construction, reconstruction or modification that commences after the Date of Lodging of the Consent Decree.

89. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or State laws, regulations, or permit conditions, except as expressly specified in Paragraphs 87 and 63. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Defendant's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

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90. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Facility or Defendant's violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 87 of this Consent Decree.

91. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and the Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. §§ 7401 *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

92. This Consent Decree does not limit or affect the rights of Defendant or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendant, except as otherwise provided by law.

1	93. This Consent Decree shall not be construed to create rights in, or grant an
2	cause of action to, any third party not party to this Consent Decree.
3	SECTION XVIII: COSTS
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5	94. The Parties shall bear their own costs of this action, including attorneys'
6	fees, except that the United States shall be entitled to collect the costs (including
7	attorneys' fees) incurred in any action necessary to collect any portion of the civil
8	penalty or any stipulated penalties due but not paid by Defendant.
9	SECTION XIX: NOTICES
0	95. Unless otherwise specified herein, whenever notifications, submissions, o
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2	communications are required by this Consent Decree, they shall be made in writing
3	and addressed as follows:
1	To U.S. EPA by USPS mail:
5	Phillip A. Brooks
5	Director, Air Enforcement Division U.S. Environmental Protection Agency
7	MC 2242A
8	ATTN: Shaun Burke 1200 Pennsylvania Ave. NW
9	Washington, D.C. 20460
)	And
1	
2	Chief, Air and TRI Section Enforcement Division
	ATTN: Charles Aldred
3	U.S. Environmental Protection Agency, Region 9
4	75 Hawthorne Street San Francisco, California 94105
5	
5	Email notices should be sent to <u>Aldred.Charles@epa.gov</u> .
7	To the United States (in addition to the U.S. EPA addresses above):
8	EES Case Management Unit
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I F	Environment and Natural Resources Division
	J.S. Department of Justice
	Box 7611 Ben Franklin Station
	Washington, D.C. 20044-7611
r	Re: DOJ No. 90-5-2-1-10458
1	To the United States by email:
e	escopy.enrd@usdoj.gov
I	nclude in the Subject line: Re: DJ# 90-5-2-1-10458 U.S. v. Nevada Cement Co., Inc.
]	To Nevada Cement Company:
	oe Sells,
1.1	President, Javada Company
	Vevada Cement Company -80 at Exit 46
1.1	P.O. Box 840
F	Femley, NV 89408-0840
(Chuck Kellett
	Senior Corporate Engineer
	Cagle Materials
	811 Turtle Creek Blvd., Suite 1100 Dallas, TX 75219
1.77	ames Graass Executive Vice President, General Counsel, Eagle Materials
1.0	811 Turtle Creek Blvd., Suite 1100
	Dallas, TX 75219
	96. Any Party may, by written notice to the other Party, change its designated
	notice recipient or notice address provided above. In addition, any Party may submit
h	any written notification, submission, or communication under this Consent Decree by
	electronic means.
	97. Notices submitted pursuant to this Section shall be deemed submitted
	upon mailing or emailing, unless otherwise provided in this Consent Decree or by
	mutual agreement of the Parties in writing.
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SECTION XX: EFFECTIVE DATE

98. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first ("Date of Entry") as recorded on the Court's docket.

SECTION XXI: RETENTION OF JURISDICTION

99. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Consent Decree or entering orders modifying this Consent Decree, pursuant to Sections XV (Dispute Resolution) and XXII (Modification), or effectuating or enforcing compliance with the terms of this Consent Decree.

SECTION XXII: MODIFICATION

100. The terms of this Consent Decree, including the Appendices, may be modified only by a subsequent written agreement signed by the United States and Defendant. With the exception of submittals under Appendices A and B that are approved or conditionally approved pursuant to Section XI (Review and Approval of Submittals), and which are incorporated by reference in this Consent Decree upon such approval or conditional approval, where any other modification constitutes a material change to this Consent Decree it shall be effective only upon approval by the Court.

101. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XV (Dispute Resolution) of this Consent Decree, provided, however, that, instead of the burden of proof provided by Paragraph 80, the

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Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b). SECTION XXIII: TERMINATION 102. Complete Termination. After Defendant has complied with the requirements of Section V (NOx Control Technology, Emission Limits, and Monitoring Requirements), Section VI (SO₂ Emission Limits, and Monitoring Requirements), and Section X (Permits) of this Consent Decree, including Continuously Operating any Control Technology as required by this Consent Decree for both Kilns, for a period of five years after establishment of the NO_x Final Emissions Limits pursuant to Section V (NO_x Control Technology, Emission Limits, and Monitoring Requirements), has complied with all other requirements of this Consent Decree, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Request for Termination of the Consent Decree, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation. If the United States agrees that the Decree as it relates to both Kilns may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating those provisions of the Decree.

103. If the United States does not agree that the Decree as a whole, or as it relates to an individual Kiln, may be terminated, Defendant may invoke Dispute Resolution under Section XV (Dispute Resolution) of this Consent Decree. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination under this Section until sixty (60) Days after service of its Request for Termination.

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SECTION XXIV: PUBLIC PARTICIPATION

104. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Consent Decree.

SECTION XXV: SIGNATORIES/SERVICE/ANSWER

105. The Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice and each undersigned representative of Defendant certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

106. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is

1	authorized to accept service of process by mail on behalf of Defendant with respect to
2	all matters arising under or relating to this Consent Decree. All Parties agree that
3	Defendant need not file an answer or otherwise respond to the Complaint in this
4	action unless or until the Court expressly declines to enter this Consent Decree.
5	
6	SECTION XXVI: INTEGRATION
7	107. This Consent Decree constitutes the final, complete, and exclusive
8	agreement and understanding among the Parties with respect to the settlement
9	embodied in the Decree and supersedes all prior agreements and understandings,
10	whether oral or written, concerning the settlement embodied herein. No other
11 12	document, nor any representation, inducement, agreement, understanding or promise
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14	constitutes any part of this Consent Decree or the settlement it represents, nor shall it
15	be used in construing the terms of this Consent Decree.
16	SECTION XXVII: FINAL JUDGMENT
17	108. Upon approval and entry of this Consent Decree by the Court, this
18	Consent Decree shall constitute a final judgment of the Court as to the United States
19	and the Defendant.
20	SECTION XXVIII: APPENDICES
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22	109. The following Appendices are attached to and incorporated as part
23	of this Consent Decree:
24	"Appendix A" contains the Test-and-Set Protocol for NOx Emission Limit requirements
25	that apply to each Kiln under this Consent Decree subject to those requirements.
26	"Appendix B" contains the Environmental Mitigation Projects Requirements.
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All terms in the Appendices shall be construed in a manner consistent with this Consent	
Decree.	
SECTION XXIX, HEADINCS	
110. Headings to the section and subsections of this Consent Decree are	
provided for convenience and do not affect the meaning or interpretation of the	
provisions of this Consent Decree.	
Dated and entered this 4th Day of October 2017	
1(l)	
June	
UNITED STATES DISTRICT COURT JUDGE	
District of Nevaua	
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	Decree. <u>SECTION XXIX: HEADINGS</u> 110. Headings to the section and subsections of this Consent Decree are provided for convenience and do not affect the meaning or interpretation of the provisions of this Consent Decree. Dated and entered this <u>4th</u> Day of October <u>2017</u> .

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Bruch Mar	Date:	3/20/17
BRUCE S. GELBER Deputy Assistant Attorney General		
Environment and Natural Resources		
Division United States Department of Justice		
A. C. L		
Vavid M Shvain	Date:	
DAVID L. McILWAIN Trial Attorney		
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David.Incliwam(a)usu0j.gov		
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Signature Page to the Consent Decree in United States v. Nevada Cement Company 1 FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY: 2 3 Date: 3/6/17 4 LAWRENCE E. STARFIELD Acting Assistant Administrator 6 Office of Enforcement and Compliance Assurance United States Environmental Protection Agency 7 8 Date: 3/1/17 9 SUSAN SHINKMAN 10 Director, Office of Civil Enforcement United States Environmental Protection Agency 11 12 Date: 2/27/2017 13 14 PHILLIP A. BROOKS Director, Air Enforcement Division 15 Office of Enforcement and Compliance Assurance United States Environmental Protection Agency 16 17 Date: 18 ROBERT G. KLEPP 19 Attorney, Air Enforcement Division Office of Enforcement and Compliance Assurance 20 United States Environmental Protection Agency 21 22 23 24 25 26 27 28 57

Case 3:17-cv-00302-MMD-WGC Document 11 Filed 10/04/17 Page 59 of 72 1 Signature Page to the Consent Decree in United States v. Nevada Cement Company 2 FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY **REGION 9:** 3 4 lan. 2017 n/s Date: 30 5 ALEXIS STRAUSS Acting Regional Administrator U.S. Environmental Protection Agency, Region 9 6 75 Hawthorne Street 7 San Francisco, California 94105 8 9 Date: IVAN LIEBEN 10 130/2017 Attorney Office of Regional Counsel 11 12 Date: 13 DAVID KIM Attorney 14 Office of Regional Counsel 15 16 17 18 19 20 21 22 23 24 25 26 27 28 58

	and the second
	Signature Page to the Consent Decree in United States v. Nevada Cement Company
	FOR DEFENDANT NEVADA
	CEMENT COMPANY:
	Jule: 01/23/2017
	Joseph P. Sells President
	Nevada Cement Company I-80 at Exit 46. P.O. Box 840
	Fernley, NV 89408-0840
	The following is the name and address of Defendant Nevada Cement Company's agent for service
	pursuant to Paragraph 106.
	Joseph P. Sells President
	Nevada Cement Company
	I-80 at Exit 46. P.O. Box 840 Fernley, NV 89408-0840
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11	Appendix A to Consent Decree
	Test-and-Set Protocol For NO _x Emission Limit
I.	Scope and Applicability
	 Defendant shall comply with the requirements contained in this Appendix A regarding installation and optimization of selective non-catalytic reduction technology ("SNCR") and, if necessary, Low NO_x Burners ("LNB") in establishing 30-Day Rolling Average Emission Limits for NO_x for Kiln 1 and Kiln 2 at the Facility.
	2. If Kiln operation is disrupted by unplanned outages, or excessive startups and Shutdowns during the CEMS Installation and Operation Period, Baseline Collection Period, SNCR Optimization Period, or SNCR Demonstration Period, or if the Kiln temporarily ceases operation for business or technical reasons, Defendant may request that EPA extend the CEMS Installation and Operation Period, Baseline Collection Period, SNCR Optimization Period or SNCR Demonstration Period pursuant to Section XI (Review and Approval of
	Submittals). EPA shall grant or deny the request and shall state the amount of time (if any) that the CEMS Installation and Operation Period, Baseline Collection Period, SNCR Optimization Period, or SNCR Demonstration Period, may be extended, which decision is subject to the Section XV (Dispute
	Resolution) provisions of the Consent Decree. Defendant may not suspend the CEMS Installation and Operation Period, Baseline Collection Period, SNCR Optimization Period, or SNCR Demonstration Period until and unless EPA has granted the request. Data gathered during periods of disruption may not be used to determine any emission calculations or limitations unless both Defendant and EPA agree to use the subject data. All collected data shall be included in each applicable report.
II.	CEMS Installation and Operation
	 No later than December 31, 2017, Defendant shall complete installation on Kiln 2, a NO_x continuous emissions monitoring system ("CEMS") certified and compliant with 40 C.F.R. Part 60. By February 1, 2018, Defendant shall complete installation of a NO_x CEMS on Kiln 1 that is certified and compliant with 40 C.F.R. Part 60.
	 Defendant shall install an Ammonia CEMS on Kilns 1 and 2 in conjunction with the installation of the NO_x CEMS pursuant to Paragraph II.1 of this Appendix. The Ammonia CEMS shall be operated whenever the NO_x CEMS is used during baseline testing and the test-and-set processes.
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m.	Baseli	ine Coll	ection Po	eriod
	1.	the I	Kilns. De	all use CEMS to collect emissions data for NO_x and Ammonia from efendant shall monitor and collect operational data as discussed in I.2.a of this Appendix.
	2.	Ami Base	monia CH eline Coll	Collection Period shall begin within 30 days after installation of EMS and certified NO_x CEMS on each Kiln. The duration of the lection Period shall last for 120 Operating Days and be undertaken is of Kiln Operation.
		a.	the en Period	lata collected during the Baseline Collection Period and through to nd of the SNCR Demonstration Period or the LNB Demonstration d shall include the following data derived from available direct toring or estimated from monitored or measured data:
			i.	Kiln flue gas temperature at the inlet to the fabric filter or at the Kiln stack (daily average);
			ii.	Kiln production in Tons of clinker (daily total) and the method used to calculate Kiln production;
			iii.	Raw material feed in Tons (daily total);
			iv.	Type and percentage of each raw material used (daily);
			v.	NO_x , SO_2 , and Ammonia concentrations (dry basis) and mass rates of NO_x and SO_2 for Kilns 1 and 2;
			vi.	Flue gas volumetric flow rate (daily average in dry acfm);
			vii.	Feed burnability (C3S) (at least daily);
			viii.	Temperatures in or near the burning zone (by infrared or optical pyrometer);
			ix.	Kiln system fuel feed rate and type of fuel by weight or heat input rate (calculated to a daily average);
			x.	Kiln amps (daily average);
			xi.	Kiln back end O ₂ concentration (daily average);
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1		xii. Kiln system draft fan settings;
3		xiii. Documentation of any Startup, Shutdown, or Malfunction events; and
5		xiv. An explanation of any gaps in the data or missing data.
5 7 8 9	b.	The Defendant shall submit a Baseline Collection Report for each Kiln within 30 days after the deadline for the end of the Baseline Collection Period on each Kiln. The Baseline Collection Report shall include the data collected during the Baseline Collection Period and a calculation of the Baseline NO _x Emissions as defined in Paragraph 8.e of Section III (Definitions).
2	с.	Hours or days when there is no Kiln Operation shall be excluded from the calculation in Paragraph III.2.b of Appendix A. However, Defendant shal provide an explanation in the Baseline Collection Report for any data excluded and provide the excluded data in the Baseline Collection Report
	d.	When submitted, Defendant shall provide the data to EPA in the Baseline Collection Report in an electronic format, consistent with and able to be manipulated by Microsoft Excel, and shall explain the reasons for any dat not collected for each of the parameters.
IV.	SNCR Design	, Installation, Optimization, and Demonstration Requirements
	1. SNC	CR Design Report:
	a.	Defendant shall submit to EPA for approval pursuant to Section XI (Review and Approval of Submittals) of the Consent Decree within 180 days from the Date of Entry, a design report for SNCR for Kiln 1 and Kiln 2 ("SNCR Design Report").
	b.	Defendant shall design each SNCR system to be capable of delivering the proposed reagent at a maximum rate of at least 1.4 mols of reagent to 1.0
		mols of NO _x (1.4:1 molar ratio) at all times based on Baseline NO _x Emissions collected pursuant to this Appendix A, and shall design each system consistent with vendor recommendations for reducing NO _x
		emissions from each Kiln. The system shall be designed to inject Ammonia into the Kiln gas stream based upon the Ammonia Slip
		measured by the Ammonia CEMS.
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1 2 3 4 5 6	c.	Defendant shall specify in the Design Report the reagent(s) selected, the location selected for reagent injection, and other design parameters. The
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5		design of the SNCR shall be based on maximum emission reduction
		effectiveness, good engineering judgment, vendor standards, available data, Kiln operability, and regulatory restrictions on reagent storage and
		use. Subsequent to EPA's approval of the 30-Day Rolling Average
0		Emission Limits for NO _x , Defendant shall have the right to use any type of quantity of reagent, provided it continues to meet the final emission limit
7		set using Ammonia.
8	d.	Any permit application that may be required under state or federal law for the SNCR shall be consistent with the approved Design Report.
10	2. 8	SNCR Optimization Protocol:
11	a.	Defendant shall submit to EPA for approval pursuant to Section XI
12		(Review and Approval of Submittals) of the Consent Decree within 60
13		days of submittal of the SNCR Design Report a protocol (the "SNCR Optimization Protocol") for optimizing each SNCR, including
14		optimization of the operational parameters resulting in the minimization of
15		emissions of NO _x to the greatest extent practicable without violating any limits for other pollutants. If EPA's action taken pursuant to the Section
16		XI (Review and Approval of Submittals) provisions of this Consent
17		Decree is more than 90 Days after EPA's receipt of the SNCR Optimization Protocol specified above, the applicable deadline to
18		commence optimization of the SNCR units, specified in Paragraph IV.3 of
19		this Appendix A, below, shall be extended by the same number of Days
20		that EPA's action exceeds the 90 days from the date Defendant submits the SNCR Optimization Protocol.
21	b.	The SNCR Optimization Protocol shall describe procedures to be used
22	0.	during the optimization period ("SNCR Optimization Period") for each
23		SNCR to optimize the different Facility processes to minimize emissions
		and adjust the Kiln and SNCR operating parameters, and shall include the following:
24		Manusa to antimize the Facility's processes to reduce NO
25		i. Measures to optimize the Facility's processes to reduce NO _x emissions in conjunction with SNCR (the "SNCR Optimization
26		Measures"), which shall include at a minimum, fuel fineness,
27		primary, secondary air rates injected into the Kiln, and adjustment to the raw mix such as fineness and composition;
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II.

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			The method Defendant will use to calculate Ammonia Slip according to Paragraph 8.d of this Consent Decree;
			iii. Measures to optimize the SNCR using the Ammonia Slip measurement at each Kiln. These measures shall include attempting to maintain an Ammonia Slip concentration of 2 to 6 ppm on a daily average basis or alternative equivalent measures of using Ammonia Slip to control the SNCR operation rate; and
			iv. Measures to be taken if optimization of the SNCR causes operational problems or excess emissions of a pollutant other than NO _x .
	3.	SNCR	Installation and Commencement of Operation:
		a.	For Kilns 1 and 2, Defendant shall complete installation of SNCR no later
			than 365 days following submission of the Baseline Collection Report for each Kiln and commence the approved SNCR Optimization Protocol as o the date of such installation.
		b.	Defendant shall commence Continuous Operation of each SNCR in accordance with the approved Optimization Protocol by adding reagent to the SNCR system.
	4.	SNCR	Optimization Period:
		a.	Defendant shall make its best efforts to establish the optimized steady- state operation of each SNCR as soon as practicable.
		b.	For Kilns 1 and 2, optimization of the SNCR's and the Facility's processe
			shall be completed within 270 days following the deadline for SNCR installation.
		4	For each Kile, Defendent shall callest the data identified in Bergarah
		c.	For each Kiln, Defendant shall collect the data identified in Paragraph III.2.a of Appendix A during the SNCR Optimization Period. When
			submitted, Defendant shall provide the data to EPA in an electronic forma consistent with and able to be manipulated by Microsoft Excel and explai
			the reasons for any data not collected.
		d.	During each SNCR Optimization Period, Defendant shall operate each
			Kiln in a manner necessary to produce a quality cement clinker product
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1		and shall use good air pollution control practices for minimizing emission
2		at all times.
3	e.	For each Kiln, Defendant shall continue to collect the data specified in
4		Paragraph III.2.a of Appendix A after the SNCR Optimization Period.
5	5. SNC	CR Optimization Report:
5		Within 60 Days following the end of the SNCR Optimization Period for
7	a.	each Kiln, Defendant shall submit to EPA for approval pursuant to Sectio
3		XI (Review and Approval of Submittals) of the Consent Decree an optimization report ("SNCR Optimization Report") for that Kiln. The
		Optimization Report shall:
		i. Demonstrate conformance with the SNCR Optimization Protocol
		for the Kiln and its associated SNCR system;
		ii. Include all data collected during the SNCR Optimization Periods;
		iii. Propose, for approval, consistent with the SNCR Optimization
		Protocol, the optimized operating parameters for the Kiln and the
		SNCR system to be maintained during the SNCR Demonstration Period; and
		 iv. Propose steps to be taken to maintain an Ammonia Slip of betwee. 2 and 6 ppm on a daily average basis or an alternative method of
		using Ammonia Slip data to control the SNCR operation during th
1		Demonstration Period.
	b.	In identifying the optimized state of each SNCR, including the injection rates of reagents, and the operating parameters for the Facility processes,
		Defendant may take into account energy, environmental, and economic
		impacts and other costs.
	c.	The SNCR Optimization Report may also include a discussion of any
		problems encountered during the SNCR Optimization Period, and how that problem may impact the potential emission reductions (including the
		quantity of reagent slip at varying injection rates and/or the possible
		observance of a detached plume above the Stack).
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1		d.	In the event Defendant determines, prior to the expiration of the SNCR
2			Optimization Period, that its ability to optimize the Kiln and/or its SNCR system will be affected by potential impairments to product quality, Kiln
3			system reliability or increased emissions of other pollutants, then Defendant shall promptly advise EPA of this determination, and include
4			these considerations as part of its recommendation in its SNCR Optimization Report.
6	6.	SNCF	C Demonstration Period:
7		6.7	The SNCR Demonstration Period for each Kiln shall commence within 7
8		a.	days after Defendant's receipt of the final approval by EPA of the SNCR
9			Optimization Report for the relevant Kiln.
10		b.	The SNCR Demonstration Period shall last 270 Operating Days. During
11			the SNCR Demonstration Period, the Kiln shall be operated consistent with the optimized operations of the Facility's processes and the SNCR
12			system as approved by EPA as part of the SNCR Optimization Report.
13		с.	Subject to Section XV (Dispute Resolution) and through written notice to
14			Defendant, EPA may itself extend or reopen the SNCR Demonstration
15			Period based upon a determination that additional data is needed to be ab to adequately establish an emission limitation.
16		d.	If evidence arises during the SNCR Demonstration Period that product
17			quality, or Kiln system reliability is impaired, then Defendant may, upon
18			notice to, and approval by, EPA, temporarily modify Kiln operation and
19			the SNCR system to mitigate the impairment and request that EPA suspend or extend the SNCR Demonstration Period for further technical
20			evaluation of the effects of process optimization on the Kiln or SNCR
21			system or, alternatively, permanently modify the manner of operation of the Kiln or SNCR system to mitigate the effects.
22		e.	During the SNCR Demonstration Period for each Kiln, Defendant shall
23		с.	collect the same data as required in Paragraph III,2.a of Appendix A.
24	7.	SNC	C Demonstration Report:
25			Within 60 Days following completion of the SNCP Demonstration Paris
26		a.	Within 60 Days following completion of the SNCR Demonstration Period for each Kiln and its associated SNCR, Defendant shall submit a
27			demonstration report to EPA ("SNCR Demonstration Report") for that
28			Kiln. The SNCR Demonstration Report shall include all of the data

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collected during the SNCR Demonstration Period and the proposed 30- Day Rolling Average Emission Limit for NO _x for each Kiln.
For the purposes of the SNCR Demonstration Report:
 The 30-Day Rolling Average Emission Limit for NO_x for each Kiln shall be based upon an analysis of CEMS data and clinker
production data collected during the SNCR Demonstration Period while the Facility's processes and SNCR system parameters were
optimized consistent with the SNCR Optimization Report, Appendix A.IV.5 of the Consent Decree.
 Total pounds of NO_x emitted during an individual Operating Day will be calculated from collected CEMS data for that Operating Day.
iii. Hours or days when there is no Kiln Operation may be excluded from the calculation in Paragraph IV.7.c of Appendix A below.
However, Defendant shall provide an explanation in the SNCR
Demonstration Report for any data excluded and include the excluded data in the Demonstration Report.
iv. All NO _x data when hourly Ammonia Slip is less than 2 ppm or
greater than 6 ppm may be used for daily NO_x average calculation For any days where the daily Ammonia Slip averages less than 2
ppm or greater than 6 ppm, Defendant shall provide justification for use of that data for use in determination of the 30-Day Rolling
Average Emission Limit for NO_x for each Kiln. EPA reserves the right to eliminate any data outside the parameters of the
Optimization Report from the final 30-Day Rolling Average Emission Limit.
The final 30-Day Rolling Average Emission Limit for NO _x for each Kiln
shall be calculated in accordance with the following formula:
$Y = u + 1.65\sigma$ where:
$X = \mu + 1.65\sigma$ where:
X = 30-Day Rolling Average Emission Limit (lbs/Ton of clinker)
μ = arithmetic mean of all of the 30-Day rolling averages
σ = standard deviation of all of the 30-Day rolling averages, as calculated
in the following manner: 67

 $\frac{1}{N}\sum_{i=1}^{N}(x_i-\bar{x})^2$

EPA shall either approve the proposed 30-Day Rolling Average Emission d. Limits for NOx or establish an alternative 30-Day Rolling Average Emission Limits. If EPA establishes an alternative 30-Day Rolling Average Emission Limit for NOx for one or both of the Kilns, Defendant will begin to meet the alternative 30-Day Rolling Average Emission Limit for NOx within 30 days of receiving notice of the limits from EPA, unless Defendant invokes dispute resolution according to the Section XV (Dispute Resolution) provisions of the Consent Decree in which case the final NOx limit shall be the 30-Day Rolling Average agreed to by the Parties at the conclusion of Informal Dispute Resolution. If Informal Dispute Resolution does not resolve the dispute, Defendant shall comply with its Proposed final NOx emissions limit until a final NOx Emissions Limit is determined by the Court. Subsequent to EPA's approval of the final 30-Day Rolling Average e. Emission Limits for NOx, Defendant shall have the right to use any type or quantity of reagent, provided that Defendant continues to comply with the 30-Day Rolling Average Emission Limit for NOx. f. Supporting data required to be submitted under this Appendix A may contain information relative to Kiln operation and production that Defendant may consider to be proprietary. In such a situation, Defendant may submit the information to EPA as CBI, subject to the provisions of 40 C.F.R. Part 2.

- g. If the final 30-Day Rolling Average Emission Limit for NO_x is established at 40% or more below Baseline NO_x Emissions, no further action shall be required under this Appendix A.
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V. LNB Installation and Optimization Requirements

1. LNB Vendor Selection Report

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1	a. Within 120 days after EPA's demand that Defendant install an LNB pursuant to Paragraph 14 of this Consent Decree, Defendant shall submit
2	an LNB Design Report that explains the reasons Defendant has selected
3	the recommended vendor(s) and includes information from the
4	recommended vendor(s) on expected LNB design and associated NO_x reductions for both Kilns. Any vendor(s) and design chosen must design
5	the LNB with the aim of achieving the result of at least 15% NO _x
6	reduction from the Kiln(s) post SNCR installation and operation. The LNB Design Report will set forth the design specifications of the selected
7	LNB system and the operating parameters and equipment adjustments to
8	be made to the LNB system and, if necessary, the SNCR systems during the LNB Optimization Period necessary to attain emission reductions.
9	
10	2. LNB Installation and Commencement of Operations
1	a. Within the time frame established pursuant to Paragraph 15, Defendant
2	shall complete installation of LNB on Kilns 1 and/or 2, as specified ("LNB Installation").
3	
4	 Defendant shall install the LNB system consistent with the selected vendor design and operate each LNB in accordance with the LNB Design Report
5	3. LNB Optimization Protocol
6	a. Consistent with the LNB Design Report, optimization of the LNBs on
7	a. Consistent with the LNB Design Report, optimization of the LNBs on Kiln 1 and Kiln 2 shall be completed no later than 4 months from LNB Installation (the "LNB Optimization Period"). Defendant shall make its
8	best efforts to establish the optimized steady-state operation of the LNB a
9	soon as practicable.
20	b. During the LNB Optimization Period, Defendant shall operate each Kiln
21	in a manner necessary to produce a quality cement clinker product and
22	shall use good air pollution control practices for minimizing emissions at all times. The SNCR shall Continuously Operate during the LNB
3	Optimization Period.
4	4. LNB Data Collection and Submission
25	4, LIVE Data Concerton and Submission
26	a. The data collected during the LNB Optimization Period shall include the
27	data specified in Section III.2.a of this Appendix A.
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		b.	The data collected during the LNB Optimization Period shall be submitted
2			to EPA within one month after the end of the Period as part of an LNB Optimization Report according to the detail and format specified by this
3			Section. The LNB Optimization Report shall also describe how Defendant met the installation and operating parameters and specification
•			set forth in the LNB Design Report.
		c.	When submitted, Defendant shall provide the data to EPA in an electronic
			format, consistent with and able to be manipulated by Microsoft Excel,
			and shall explain the reasons for any data not collected for each of the parameters.
	5.	IN	B Demonstration Period
	2.	LIU	
		a.	To establish a revised final NO _x 30-Day Rolling Average Limit based upon operation of the LNB and the SNCR, Defendant shall duplicate and
			comply with all applicable requirements of Section IV.6 of this Appendix
			A, except the LNB Demonstration Period shall last 180 Operating Days.
	6.	LN	B Demonstration Report
		a.	Defendant shall submit a demonstration report to EPA for approval for
			that Kiln within 60 Days following completion of the LNB Demonstration Period and comply with all applicable requirements of Section IV.7 of thi
			Appendix A including proposing for approval under Section XI (Review
			and Approval of Submittals), a revised final 30-Day Rolling Average Emission Limit. Under no circumstance may this proposed revised final
			limit be less stringent than the limit proposed and/or approved pursuant to
			the SNCR Demonstration process. The SNCR shall Continuously Operate during the LNB Demonstration Period.
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	Appendix B to Consent Decree: Environmental Mitigation Projects				
of this	pliance with and in addition to the requirements in Section VII (Other Injunctive Relief) Consent Decree, Defendant shall comply with the requirements of this Appendix B to that the benefits for the federally directed Environmental Mitigation Projects below are ed.				
Clean	Diesel Engine Replacement Projects				
1.	Defendant shall replace an existing heavy-duty diesel truck with a new heavy-duty diese truck subject to the emission standards set forth at 40 C.F.R. § 86.007-11, at a cost of no less than \$120,000. Defendant shall also replace an existing rail car mover with a Tier 0 or Tier 1 engine with a new rail car mover with a Tier 4 engine subject to the emission standards set forth at 40 C.F.R. Part 1039, at a cost of not less than \$300,000.				
2.	The replaced engines will be located at Defendant's Fernley facility and related quarries and between those locations. Defendant shall complete the requirements within two (2) years after the Effective Date.				
3.	Defendant shall provide a mechanism by which each replaced engine in Paragraph 1 of this Appendix B above is properly disposed of, which must include destruction of the engine block.				
4.	Nothing in this Consent Decree shall be interpreted to prohibit Defendant from completing any of the Projects ahead of schedule.				
5.	In accordance with the requirements of Section XII (Reporting Requirements) of the Consent Decree, within sixty (60) Days following the completion of each Project, Defendant shall submit to U.S. EPA for approval a report that documents:				
	a. The date the replacement was completed;				
	 The results of implementation of the replacement, including the estimated emission reductions or other environmental benefits achieved; and 				
	c. The cost incurred by Defendant in implementing the replacement.				
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