

Bureau of Air Pollution Control

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249 p: 775-687-9349 • www.ndep.nv.gov/bapc

Facility ID No. A2164 Permit No. AP7374-4671 CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SILVER SLATE, LLC (HEREINAFTER REFERRED TO AS PERMITTEE)

Mailing Address: 7400 USA PARKWAY, McCarran, NV 89437 Physical Address: 7400 USA PARKWAY, McCarran, NV 89437

Driving Directions: I-80 E TOWARD ELKO FOR 15.7 MILES. TAKE EXIT 32 FOR USA PARKWAY FOR 0.2 MILES. TURN

RIGHT ONTO NV439 AND PROCEED 7.4 MILES.

General Facility Location:

SECTION 20, T 19 N, R 23 E, MDB&M HA 83 – TRACY SEGMENT / STOREY COUNTY NORTH 4,375,100 M, EAST 291,000 M, UTM ZONE 11, NAD 83

Emission Unit List:

- A. System 01 Group 1 Emergency Generators
- B. System 02 Group 1a Emergency Generators
- C. System 03 Group 1b Emergency Generators
- **D.** System 04 Group 1b Emergency Generators
- E. System 05 Group 1b Emergency Generators
- F. System 06 Group 1c Emergency Generators
- G. System 07 Group 1c Emergency Generators
- H. System 08 Group 2 Emergency Generators
- I. System 09 Group 2a Emergency Generators
- J. System 10 Group 2b Emergency Generators
- K. System 11 R&D Backup Emergency Generator

L. System 12 – Fire Pump Engines

S2.002 Fire Pump Engine 1 S2.003 Fire Pump Engine 2

M. System 13 – Bloom Energy Server

PF1.001	Bloom Solid Oxide Fuel Cell ES01
PF1.002	Bloom Solid Oxide Fuel Cell ES02
PF1.003	Bloom Solid Oxide Fuel Cell ES03
PF1.004	Bloom Solid Oxide Fuel Cell ES04
PF1.005	Bloom Solid Oxide Fuel Cell ES05
PF1.006	Bloom Solid Oxide Fuel Cell ES06

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Section I. General Conditions

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

Prohibited Acts

The Permittee shall not knowingly:

- 1. Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information;
- 2. Fail to pay any fee;
- 3. Falsify any material statement, representation or certification in any notice or report; or
- 4. Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or NRS 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions.

B. Nevada Administrative Code (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 (Federally Enforceable SIP Requirement)

Maximum Opacity

- 1. Except as otherwise provided in this section and NAC 445B.2202, no owner or operator may 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.

D. NAC 445B.22037 (Federally Enforceable SIP Requirement)

Fugitive Dust

- 1. The Permittee may not cause or permit the handling, transporting, or storing of any material in a manner that allows or may allow controllable particulate matter to become airborne.
- 2. Except as otherwise provided in subsection 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 this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation.
- 3. Except as provided in subsection 4, the Permittee may not disturb or cover 5 acres or more of land or its topsoil until the 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 subsections 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.

E. NAC 445B.22067 (Federally Enforceable SIP Requirement)

Open Burning

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



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Section I. General Conditions (continued)

F. NAC 445B.22087

Odors

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 comfortable enjoyment of life or property.

G. NAC 445B.225 (Federally Enforceable SIP Requirement)

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.

H. NAC 445B.252 (Federally Enforceable SIP Requirement)

Testing and Sampling

- 1. To determine compliance with NAC 445B.001 to 445B.3497, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the Director may either conduct or order the owner 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; or
 - b. Waives the requirement for tests of performance because the owner or operator 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 owner or operator 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 owner or operator 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.
- 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 owner 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.

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Section I. General Conditions (continued)

H. NAC 445B.252 (Federally Enforceable SIP Requirement) (continued)

<u>Testing and Sampling</u> (continued)

- 9. Notwithstanding the provisions of subsection 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.

I. NAC 445B.273(1)

Schedules for Compliance

The Permittee must comply with NAC 445B.001 to 445B.3689, 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.

J. NAC 445B.315(3)(i) (Federally Enforceable SIP Requirement)

Fees

The Permittee shall pay fees to the Director in accordance with the provisions set forth in NAC 445B.327 and 445B.331.

K. NAC 445B.319 (Federally Enforceable SIP Requirement)

Administrative Amendment

Any changes to the operating permit to construct will comply with all provisions established under NAC 445B.319.

L. NAC 445B.326(1)

Assertion of Emergency as Affirmative Defense to Action for Noncompliance

The Permittee may assert an affirmative defense to an action brought for noncompliance with a technology-based emission limitation contained in the operating permit if the holder of the operating permit demonstrates through signed, contemporaneous operating logs or other relevant evidence that:

- 1. An emergency occurred and the holder of the operating permit can identify the cause of the emergency;
- 2. The facility was being properly operated at the time of the emergency;
- 3. During the emergency, the holder of the operating permit took all reasonable steps to minimize excess emissions; and
- 4. The holder of the operating permit 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.

M. NAC 445B.3265

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 determination that there has been a violation of NAC 445B.001 to 445B.3689, inclusive, or the provisions of 40 CFR Part 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.

N. NAC 445B.3365(2)(c) (Federally Enforceable SIP Requirement)

Severability

Each of the conditions and requirements of the operating permit to construct is severable and, if any are held invalid, the remaining conditions and requirements continue in effect.

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Section I. General Conditions (continued)

O. NAC 445B.3365(2)(d) (Federally Enforceable SIP Requirement)

Noncompliance with Conditions

The Permittee shall comply with all conditions of this operating permit to construct. Any noncompliance constitutes a violation and is a ground for:

- 1. An action for noncompliance;
- 2. The revoking and reissuing, or the terminating, of the operating permit to construct by the Director; or
- 3. The reopening or revising of the operating permit to construct by the holder of the operating permit to construct as directed by the Director.

P. NAC 445B.3365(2)(e) (Federally Enforceable SIP Requirement)

Need to Halt or Reduce Activity to Maintain Compliance

The need to halt or reduce activity to maintain compliance with the conditions of the operating permit to construct is not a defense to noncompliance with any condition of the operating permit to construct.

Q. NAC 445B.3365(2)(f) (Federally Enforceable SIP Requirement)

Revise, Revoke and Reissue, Reopen and Revise or Terminate

The Director may revise, revoke and reissue, reopen and revise, or terminate the operating permit to construct for cause.

R. NAC 445B.3365(2)(g) (Federally Enforceable SIP Requirement)

Property Rights

The operating permit to construct does not convey any property rights or any exclusive privilege.

S. NAC 445B.3365(2)(h) (Federally Enforceable SIP Requirement)

Request for Information

The Permittee shall provide the Director, in writing and within a reasonable time, with any information that the Director requests to determine whether cause exists for revoking or terminating the operating permit to construct, or to determine compliance with the conditions of the operating permit to construct.

T. NAC 445B.3365(2)(i) (Federally Enforceable SIP Requirement)

Right to Entry

The Permittee shall allow the Director or any authorized representative of the Director, 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 to construct.
- 2. Have access to and copy, during normal business hours, any records that are kept pursuant to the conditions of the operating permit to construct;
- 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 to construct; and
- 4. Sample or monitor, at reasonable times, substances or parameters to determine compliance with the conditions of the operating permit to construct or applicable requirements.

U. NAC 445B.3365(2)(j) (Federally Enforceable SIP Requirement)

Certification

A responsible official of the Permittee shall certify that, based on information and belief formed after reasonable inquiry, the statements made in any document required to be submitted by any condition of the operating permit to construct are true, accurate and complete.



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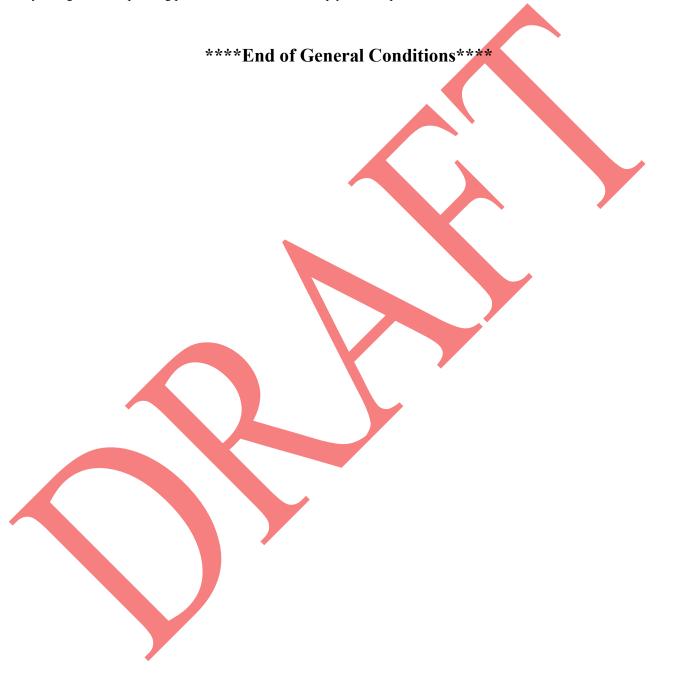
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Section I. General Conditions (continued)

V. NAC 445B.342 (Federally Enforceable SIP Requirement)
Notification of Authorized Changes

Any changes to the operating permit to construct will comply with all provisions established under NAC 445B.342.





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Section II. Construction Conditions

A. Notification (NAC 445B.250; NAC 445B.3365) (Federally Enforceable SIP Requirement)

The Permittee shall notify the Director in writing of the following for Systems 01 through 13 – added on DRAFT.

- 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.

B. NAC 445B.3366 (Federally Enforceable SIP Requirement)

Expiration

- 1. If construction will occur in one phase, an operating permit to construct for a new or modified stationary source expires if construction is not commenced within 18 months after the date of issuance thereof or construction of the facility is delayed for 18 months after initiated. The Director may extend the date on which the construction may be commenced upon a showing that the extension is justified.
- 2. If construction will occur in more than one phase, the projected date of the commencement of construction of each phase of construction must be approved by the Director. An operating permit to construct expires if the initial phase of construction is not commenced within 18 months after the projected date of the commencement of construction approved by the Director. The Director may extend only the date on which the initial phase of construction may be commenced upon a showing that the extension is justified.
- 3. Except as otherwise provided in this subsection, an operating permit to construct expires if a complete application for a Class I operating permit or modification of an existing Class I operating permit is not submitted within 12 months after the date of initial start-up.

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



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Section IIA. Specific Construction Requirements

- A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u>
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3365, 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 IIA-1 and Table IIA-2 below:

Table IIA-1: Initial Opacity Compliance Demonstration					
System	Number of Emission Units To Be Tested	Pollutant To Be Tested	Testing Methods/Procedures		
System 06 – Group 1c Emergency Generators	2	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 07 – Group 1c Emergency Generators	1	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 11 – R&D Backup Emergency Generator	1	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 13 – Bloom Energy Server	1	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.		



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Section IIA. Specific Construction Requirements (continued)

A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)

	Table IIA-2: Initial Performance Demonstration					
System	Number of Emission Units To Be Tested	Pollutant To Be Tested	Testing Methods/Procedures			
System 06 – Group 1c Emergency Generators	2	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.			
			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.			
		NO _X	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.			
		СО	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.			
System 07 – Group 1c Emergency Generators		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.			
			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.			
	1	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.			
		NO _X	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.			
		СО	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.			

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Section IIA. Specific Construction Requirements (continued)

A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)

	Tal	ble IIA-2: Init	ial Performance Demonstration
System	Number of Emission Units To Be Tested	Pollutant To Be Tested	Testing Methods/Procedures
System 11 – R&D Backup Emergency Generator	1	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.
		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 PM2.5 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.
		NO _X	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. 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
System 13 – Bloom Energy Server		PM	of one hour. 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 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 IIA. Specific Construction Requirements (continued)

- A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests</u> (continued)
 - 2. 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))
 - 3. Testing shall be conducted on the exhaust stack (post controls).
 - 4. Initial opacity compliance demonstrations and initial performance tests in **Table IIA-1** and **Table IIA-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 tests unless otherwise specified in the applicable standard. (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 IIA-1 and Table IIA-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 do not provide adequate compliance demonstration, the Director may require additional testing.

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



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Section III. General Operating Conditions

A. NAC 445B.227 (Federally Enforceable SIP Requirement)

Prohibited Conduct

The Permittee may not:

- 1. Operate a stationary source of air pollution unless the control equipment for air pollution that is required by applicable requirements or conditions of the 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.

B. NAC 445B.232

Excess Emissions: Schedule Maintenance, Testing or Repairs; Notification of Director

- 1. Scheduled maintenance or testing or scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.3689, 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. Each owner or operator 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.3689, inclusive. The scheduled maintenance or testing must not be conducted unless the scheduled maintenance or testing is approved pursuant to subsection 1.
- 3. Each owner or operator 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.3689, inclusive. The scheduled repairs must not be conducted unless the scheduled repairs are approved pursuant to subsection 1.
- 4. Each owner or operator shall notify the Director 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. Email to: aircompliance@ndep.nv.gov
- 5. Each owner or operator 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. Each owner or operator 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.



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Section III. General Operating Conditions (continued)

C. SIP 445.667 (Federally Enforceable SIP Requirement)

Excess Emissions: Scheduled Maintenance; Testing; Malfunctions

- 1. Scheduled maintenance or testing approved by the Director or repairs which may result in excess emissions of air contaminants prohibited by SIP 445.430 to 445.846, inclusive, must be performed during a time designated by the Director as being favorable for atmospheric ventilation.
- 2. The Director shall be notified in writing on the time and expected duration at least 24 hours in advance of any scheduled maintenance or repairs which may result in excess emissions of air contaminants prohibited by SIP 445.430 to 445.846, inclusive.
- 3. The Director must be notified within 24 hours after any malfunction, breakdown or upset of process or pollution control equipment or during startup of such equipment.
- 4. The owner or operator of an affected facility shall provide the Director, within 15 days after any malfunction, breakdown, upset, startup or human error sufficient information to enable the Director to determine the seriousness of the excess emissions. The submission must include as a minimum:
 - a. The identity of the stack and/or other emission point where the excess emission occurred.
 - b. The estimated magnitude of the excess emissions expressed in opacity or in the units of the applicable emission limitation 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, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions.
 - f. The steps taken to limit the excess emissions.
 - g. Documentation that the air pollution control equipment, 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.
- D. SIP Article 2.5.4 (Federally Enforceable SIP Requirement)

Scheduled Maintenance, Testing, and Breakdown or Upset

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 the regulations.

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



Bureau of Air Pollution Control

Facility ID No. A2164 Permit No. AP7374-4671 CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section IV. General Monitoring, Recordkeeping, and Reporting Requirements

A. NAC 445B.3365.2(b) (Federally Enforceable SIP Requirement)
Records

The Permittee shall retain records of all required monitoring data and supporting information for 5 years from the date of the sample collection, measurement, report or analysis. Supporting information includes, but is not limited to, all records regarding calibration and maintenance of the monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.

B. NAC 445B.3365.2(h) (Federally Enforceable SIP Requirement)

Reporting

The Permittee shall provide the Director, in writing and within a reasonable time, with any information that the Director requests to determine whether cause exists for revoking or terminating the operating permit to construct, or to determine compliance with the conditions of the operating permit to construct.

The Permittee will submit yearly reports including, but not limited to, throughput, production, fuel consumption, hours of operation, and emissions. These reports will be submitted on the form provided by the Bureau of Air Pollution Control for all emission units/systems specified on the form. The completed form must be submitted to the Bureau of Air Pollution Control no later than March 1 annually for the preceding calendar year, unless otherwise approved by the Bureau of Air Pollution Control.

C. NAC 445B.265.1 (Federally Enforceable SIP Requirement)

Records of the Occurrence and Duration of Any Start-Up, Shutdown or Malfunction

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.

****End of General Monitoring, Recordkeeping, and Reporting Requirements****





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions

A. System 01

System 01 – Group 1 Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 01 has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 01</u>

Stack Height: 40.0 feet Stack Diameter: 13.8 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 01 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 01** shall not exceed **186.0** gallons per hour, averaged over a calendar day, nor more than **18,600.0** gallons per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 01 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 01 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 01 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.65** pounds per hour, nor more than **0.032** 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 **0.65** pounds per hour, nor more than **0.032** 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 **0.032** tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.039** pounds per hour, nor more than **0.0020** tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 42.5 pounds per hour, nor more than 2.12 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed **4.64** pounds per hour, nor more than **0.23** tons per 12-month rolling period.
- h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **1.79** pounds per hour, nor more than **0.090** tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 01 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 01** shall not exceed **0.48** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 01** shall not exceed **18.2** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

A. System 01 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 01** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 01 shall not exceed the limit set forth in A.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 01 shall not exceed the limit set forth in A.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 01** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

- a. Emissions Standards (40 CFR 60.4205)
 - The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))
 - (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 560 kW: (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
 - (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

A. System 01 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in A.5.d.(5) of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in A.5.d.(5) of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs A.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs A.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **A.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **A.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph A.5.d.(4)(b) of this section. Except as provided in paragraph A.5.d.(4)(c) of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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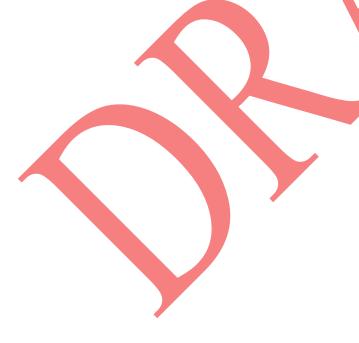
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Section V. Specific Operating Conditions (continued)

A. System 01 (continued)

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

- d. <u>Compliance Requirements</u> (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

B. System 02

System 02 – Group 1a Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 02** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 02</u>

Stack Height: 16.5 feet Stack Diameter: 13.8 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 02 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 02** shall not exceed **226.0** gallons per hour, averaged over a calendar day, nor more than **22,600.0** gallons per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 02 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 02 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 02 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.51** pounds per hour, nor more than **0.025** 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 **0.51** pounds per hour, nor more than **0.025** 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 0.51 pounds per hour, nor more than 0.025 tons per 12-month rolling period.
- d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.048 pounds per hour, nor more than 0.0024 tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 49.2 pounds per hour, nor more than 2.46 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 5.54 pounds per hour, nor more than 0.28 tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 1.68 pounds per hour, nor more than 0.084 tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 02 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 02** shall not exceed **0.46** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 02** shall not exceed **22.1** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

B. System 02 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 02** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 02 shall not exceed the limit set forth in B.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 02 shall not exceed the limit set forth in B.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 02** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 560 kW: (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. <u>Fuel Requirements</u> (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

B. System 02 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **B.5.d.(5**) of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **B.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs **B.5.d.(4)(a) through (c)** of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs **B.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **B.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **B.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph **B.5.d.(4)(b)** of this section. Except as provided in paragraph **B.5.d.(4)(c)** of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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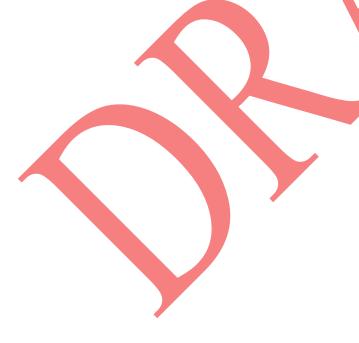
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Section V. Specific Operating Conditions (continued)

B. System 02 (continued)

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

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

C. System 03

System 03 – Group 1b Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 03** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 03</u>

Stack Height: 16.5 feet Stack Diameter: 13.8 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 03 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 03** shall not exceed **184.0** gallons per hour, averaged over a calendar day, nor more than **18,400.0** gallons per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 03 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 03 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 03 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.17** pounds per hour, nor more than **0.0086** 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 **0.17** pounds per hour, nor more than **0.0086** 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 0.0086 tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.039** pounds per hour, nor more than **0.0020** tons per 12-month rolling period.
- e. The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 42.0 pounds per hour, nor more than 2.10 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed **2.00** pounds per hour, nor more than **0.10** tons per 12-month rolling period.
- h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **0.68** pounds per hour, nor more than **0.034** tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 03 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 03** shall not exceed **0.48** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 03** shall not exceed **18.0** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

C. System 03 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 03** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 03 shall not exceed the limit set forth in C.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 03 shall not exceed the limit set forth in C.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 03** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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. <u>Federal Requirements</u>

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 560 kW: (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

C. System 03 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)

 If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in C.5.d.(5) of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in C.5.d.(5) of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs C.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs C.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs C.5.d.(4)(b) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph C.5.d.(4)(c) of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - Emergency stationary ICE 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 paragraph C.5.d.(4)(b) of this section. Except as provided in paragraph C.5.d.(4)(c) of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



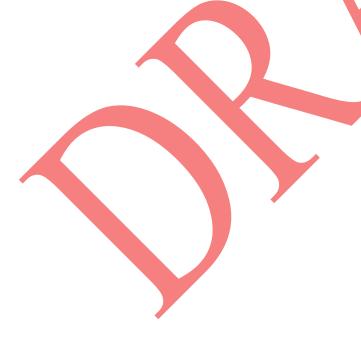
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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

- C. System 03 (continued)
 - 5. Federal Requirements (continued)
 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary
 Compression Ignition Internal Combustion Engines (continued)
 - d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
 - e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

D. System 04

System 04 – Group 1b Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 04** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 04</u>

Stack Height: 16.5 feet Stack Diameter: 14.7 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 04 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 04** shall not exceed **184.0 gallons** per hour, averaged over a calendar day, nor more than **18,400.0 gallons** per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 04 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 04 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 04 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.17** pounds per hour, nor more than **0.0086** 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 **0.17** pounds per hour, nor more than **0.0086** 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 0.0086 tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.039** pounds per hour, nor more than **0.0020** tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 42.0 pounds per hour, nor more than 2.10 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed **2.00** pounds per hour, nor more than **0.10** tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.68 pounds per hour, nor more than 0.034 tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 04 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 04** shall not exceed **0.48** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 04** shall not exceed **18.0** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

D. System 04 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 04** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 04 shall not exceed the limit set forth in **D.2.b.** of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 04 shall not exceed the limit set forth in D.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 04** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 560 kW: (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

D. System 04 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)

 If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **D.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **D.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs **D.5.d.(4)(a) through (c)** of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs **D.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **D.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **D.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph **D.5.d.(4)(b)** of this section. Except as provided in paragraph **D.5.d.(4)(c)** of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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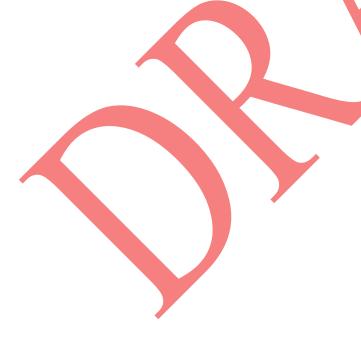
Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

D. System 04 (continued)

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

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

E. System 05

System 05 – Group 1b Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 05** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 05</u>

Stack Height: 50.0 feet Stack Diameter: 14.8 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 05 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 05** shall not exceed **184.0 gallons** per hour, averaged over a calendar day, nor more than **18,400.0 gallons** per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 05 may operate a total of 24 hours per day.
 - (2) **Each emission unit in System 05** may operate a total of **100** hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 05 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.17** pounds per hour, nor more than **0.0086** 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 **0.17** pounds per hour, nor more than **0.0086** 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 0.0086 tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.039** pounds per hour, nor more than **0.0020** tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 42.0 pounds per hour, nor more than 2.10 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed **2.00** pounds per hour, nor more than **0.10** tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.68 pounds per hour, nor more than 0.034 tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 05 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 05** shall not exceed **0.48** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 05** shall not exceed **18.0** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

E. System 05 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in System 05 (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 05 shall not exceed the limit set forth in E.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 05 shall not exceed the limit set forth in E.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 05** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 560 kW: (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed **3.5** grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

E. System 05 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **E.5.d.(5**) of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in E.5.d.(5) of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs E.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs E.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs E.5.d.(4)(b) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph E.5.d.(4)(c) of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph E.5.d.(4)(b) of this section. Except as provided in paragraph E.5.d.(4)(c) of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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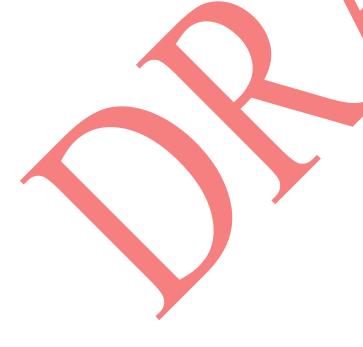
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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

- E. System 05 (continued)
 - 5. <u>Federal Requirements</u> (continued)

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

F. System 06

System 06 – Group 1c Emergency Generators

- Air Pollution Control Equipment (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement) 1.
 - Each emission unit in System 06 has no add-on controls.
 - Descriptive Stack Parameters for each emission unit in System 06 b.

Stack Height: 16.5 feet Stack Diameter: 14.7 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - Each emission unit in System 06 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - The maximum allowable fuel consumption rate for each emission unit in System 06 shall not exceed 221.0 gallons per hour, averaged over a calendar day, nor more than 22,100.0 gallons per 12-month rolling period of non-emergency use.
 - d. **Hours**
 - Each emission unit in System 06 may operate a total of 24 hours per day. (1)
 - Each emission unit in System 06 may operate a total of 100 hours per year of non-emergency use. There is no (2) time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement) 3.

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 06 the following pollutants in excess of the following specified limits:

- The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.65 pounds per hour, nor more than 0.032 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 0.65 pounds per hour, nor more than 0.032 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 c. exceed **0.65** pounds per hour, nor more than **0.032** tons per 12-month rolling period.
- The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.047 pounds per hour, nor more than 0.0023 tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 49.2 pounds per hour, nor more than **2.46** tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in **Section VI** of this operating permit.
- The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 5.54 pounds per hour, nor more than 0.28 g. tons per 12-month rolling period.
- The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 1.79 pounds per hour, nor h. more than **0.090** tons per 12-month rolling period.
- NAC 445B.22017 The opacity from the each emission unit in System 06 shall not equal or exceed 20 percent. i.
- NAC 445B 2203 The maximum allowable discharge of PM₁₀ to the atmosphere from each emission unit in System j. **06** shall not exceed **0.46** pounds per MMBtu.
- NAC 445B.22047 The maximum allowable discharge of sulfur to the atmosphere from each emission unit in System k. **06** shall not exceed **21.7** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

F. System 06 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 06** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 06 shall not exceed the limit set forth in F.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 06 shall not exceed the limit set forth in F.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 06** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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. <u>Federal Requirements</u>

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 2,237 kW (3,000 hp): (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. <u>Fuel Requirements</u> (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

F. System 06 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **F.5.d.(5**) of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **F.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs F.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs F.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **F.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **F.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph **F.5.d.(4)(b)** of this section. Except as provided in paragraph **F.5.d.(4)(c)** of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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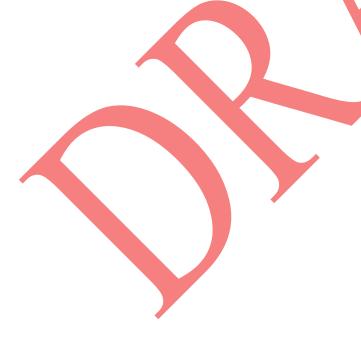
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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

- F. System 06 (continued)
 - 5. <u>Federal Requirements</u> (continued)

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

G. System 07

System 07 – Group 1c Emergency Generators

- 1. Air Pollution Control Equipment (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 07** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 07</u>

Stack Height: 50.0 feet Stack Diameter: 14.7 feet Stack Temperature: 249 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 07 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 07** shall not exceed **221.0** gallons per hour, averaged over a calendar day, nor more than **22,100.0** gallons per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 07 may operate a total of 24 hours per day.
 - (2) **Each emission unit in System 07** may operate a total of **100** hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 07 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.65** pounds per hour, nor more than **0.032** 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 **0.65** pounds per hour, nor more than **0.032** 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 **0.032** tons per 12-month rolling period.
- d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.047 pounds per hour, nor more than 0.0023 tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 49.2 pounds per hour, nor more than 2.46 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 5.54 pounds per hour, nor more than 0.28 tons per 12-month rolling period.
- h. The discharge of **VOCs** (volatile organic compounds) to the atmosphere shall not exceed **1.79** pounds per hour, nor more than **0.090** tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 07 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 07** shall not exceed **0.46** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 07** shall not exceed **21.7** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

G. System 07 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 07** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 07 shall not exceed the limit set forth in G.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 07 shall not exceed the limit set forth in G.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 07** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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. <u>Federal Requirements</u>

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 2,237 kW (3,000 hp): (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed **3.5** grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. <u>Fuel Requirements</u> (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

G. System 07 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **G.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in G.5.d.(5) of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs G.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs G.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **G.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **G.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph G.5.d.(4)(b) of this section. Except as provided in paragraph G.5.d.(4)(c) of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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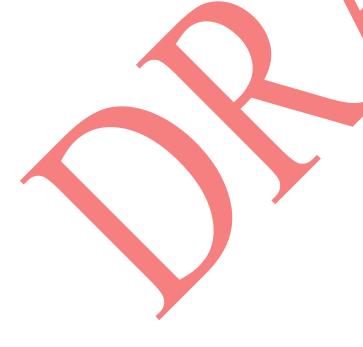
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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

Compression Ignition Internal Combustion Engines (continued)

- G. System 07 (continued)
 - 5. <u>Federal Requirements</u> (continued)
 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary
 - d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
 - e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

H. System 08

System 08 – Group 2 Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 08 has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 08</u>

Stack Height: 44.3 feet Stack Diameter: 15.8 feet Stack Temperature: 206 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 08 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 08** shall not exceed **221.0 gallons** per hour, averaged over a calendar day, nor more than **22,100.0 gallons** per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 08 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 08 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 08 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.64** pounds per hour, nor more than **0.032** 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 **0.64** pounds per hour, nor more than **0.032** 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 **0.64** pounds per hour, nor more than **0.032** tons per 12-month rolling period.
- d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.047 pounds per hour, nor more than 0.0023 tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 46.2 pounds per hour, nor more than 2.31 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed **4.91** pounds per hour, nor more than **0.25** tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.96 pounds per hour, nor more than 0.048 tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 08 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 08** shall not exceed **0.46** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 08** shall not exceed **21.7** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

H. System 08 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 08** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 08 shall not exceed the limit set forth in H.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 08 shall not exceed the limit set forth in H.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 08** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

- a. Emissions Standards (40 CFR 60.4205)
 - The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))
 - (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 2,237 kW (3,000 hp): (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed **3.5** grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
 - (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.



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Section V. Specific Operating Conditions (continued)

H. System 08 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **H.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **H.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs H.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs H.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **H.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **H.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph H.5.d.(4)(b) of this section. Except as provided in paragraph H.5.d.(4)(c) of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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Section V. Specific Operating Conditions (continued)

H. System 08 (continued)

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

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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Section V. Specific Operating Conditions (continued)

I. System 09

System 09 – Group 2a Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 09** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 09</u>

Stack Height: 16.5 feet Stack Diameter: 15.8 feet Stack Temperature: 206 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 09 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 09** shall not exceed **211.0 gallons** per hour, averaged over a calendar day, nor more than **21,100.0 gallons** per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 09 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 09 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 09 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.54** pounds per hour, nor more than **0.027** 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 **0.54** pounds per hour, nor more than **0.027** 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 0.54 pounds per hour, nor more than 0.027 tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.045** pounds per hour, nor more than **0.0022** tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 46.0 pounds per hour, nor more than 2.30 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 3.54 pounds per hour, nor more than 0.18 tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.89 pounds per hour, nor more than 0.044 tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 09 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System 09** shall not exceed **0.47** pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 09** shall not exceed **20.7** pounds per hour.



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

I. System 09 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 09** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 09 shall not exceed the limit set forth in 1.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 09 shall not exceed the limit set forth in I.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 09** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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. <u>Federal Requirements</u>

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 2,237 kW (3,000 hp): (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

I. System 09 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **I.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **I.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs I.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs I.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **I.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **I.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - Emergency stationary ICE 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 paragraph **I.5.d.(4)(b)** of this section. Except as provided in paragraph **I.5.d.(4)(c)** of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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Section V. Specific Operating Conditions (continued)

- I. System 09 (continued)
 - 5. <u>Federal Requirements</u> (continued)
 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary
 Compression Ignition Internal Combustion Engines (continued)
 - d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
 - e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))





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Section V. Specific Operating Conditions (continued)

J. System 10

System 10 – Group 2b Emergency Generators

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **Each emission unit in System 10** has no add-on controls.
 - b. <u>Descriptive Stack Parameters for each emission unit in System 10</u>

Stack Height: 16.5 feet Stack Diameter: 14.7 feet Stack Temperature: 206 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. Each emission unit in System 10 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **each emission unit in System 10** shall not exceed **211.0 gallons** per hour, averaged over a calendar day, nor more than **21,100.0 gallons** per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) Each emission unit in System 10 may operate a total of 24 hours per day.
 - (2) Each emission unit in System 10 may operate a total of 100 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from each emission unit in System 10 the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed **0.37** pounds per hour, nor more than **0.018** 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 **0.37** pounds per hour, nor more than **0.018** 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 0.37 pounds per hour, nor more than 0.018 tons per 12-month rolling period.
- d. The discharge of **SO**₂ (sulfur dioxide) to the atmosphere shall not exceed **0.045** pounds per hour, nor more than **0.0022** tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 46.6 pounds per hour, nor more than 2.33 tons per 12-month rolling period.
- f. The discharge of NO_x (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 1.95 pounds per hour, nor more than 0.10 tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.95 pounds per hour, nor more than 0.048 tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the each emission unit in System 10 shall not equal or exceed 20 percent.
- j. NAC 445B 2203 The maximum allowable discharge of **PM**₁₀ to the atmosphere from **each emission unit in System** 10 shall not exceed 0.47 pounds per MMBtu.
- k. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **each emission unit in System 10** shall not exceed **20.7** pounds per hour.



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Section V. Specific Operating Conditions (continued)

J. System 10 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 10** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 10 shall not exceed the limit set forth in J.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 10 shall not exceed the limit set forth in J.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 10** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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. <u>Federal Requirements</u>

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 2,237 kW (3,000 hp): (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. <u>Fuel Requirements</u> (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.



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Section V. Specific Operating Conditions (continued)

J. System 10 (continued)

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

- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **J.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **J.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs J.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs J.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **J.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **J.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - Emergency stationary ICE 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 paragraph **J.5.d.(4)(b)** of this section. Except as provided in paragraph **J.5.d.(4)(c)** of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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Section V. Specific Operating Conditions (continued)

- J. System 10 (continued)
 - 5. <u>Federal Requirements</u> (continued)

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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Section V. Specific Operating Conditions (continued)

K. System 11

System 11 – R&D Backup Emergency Generator		Location UTM (Zone 11, NAD 83)		
System 11 -	System 11 – R&D Backup Emergency Generator		m East	
S2.001	R&D Backup Emergency Generator	4,374,824	291,389	

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **S2.001** has no add-on controls.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 9.5 feet Stack Diameter: 7.9 feet Stack Temperature: 172 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. S2.001 may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **S2.001** shall not exceed **207.0** gallons per hour, averaged over a calendar day, nor more than **20,700.0** gallons per 12-month rolling period of non-emergency use.
 - d. Hours
 - (1) **S2.001** may operate a total of **24** hours per day.
 - (2) **S2.001** may operate a total of **100** hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **S2.001** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.81** pounds per hour, nor more than **0.040** 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 0.81 pounds per hour, nor more than 0.040 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 **0.81** pounds per hour, nor more than **0.040** tons per 12-month rolling period.
- d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.044 pounds per hour, nor more than 0.0022 tons per 12-month rolling period.
- e. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed 49.2 pounds per hour, nor more than 2.46 tons per 12-month rolling period.
- f. The discharge of NOx (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 9.39 pounds per hour, nor more than 0.47 tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 2.67 pounds per hour, nor more than 0.13 tons per 12-month rolling period.
- i. NAC 445B.22017—The opacity from the S2.001 shall not equal or exceed 20 percent.
- j. NAC 445B.2203 The maximum allowable discharge of PM₁₀ to the atmosphere from S2.001 shall not exceed 0.47 pounds per MMBtu.
- k. NAC 445B 22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.001** shall not exceed **20.3** pounds per hour.



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Section V. Specific Operating Conditions (continued)

K. System 11 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **each emission unit** in **System 11** (in gallons) by use of the engine control module (ECM).
- b. Record the corresponding average hourly consumption rate in gallons per hour. The average hourly consumption rate shall be determined from the total daily consumption and the total daily hours of operation.
- c. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in each emission unit in System 11 shall not exceed the limit set forth in K.2.b. of this section.
- e. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in each emission unit in System 11 shall not exceed the limit set forth in K.2.b. of this section.
- f. Monitor and record the total daily hours of operation for **each emission unit in System 11** for each calendar day of operation by use of the ECM. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- g. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

a. Emissions Standards (40 CFR 60.4205)

The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))

- (1) For a 2011 model year and later Tier 2 non-road engine with a rated power greater than 2,237 kW (3,000 hp): (40 CFR 60.4202(b)(2), 40 CFR 1039 Appendix I)
 - (a) The discharge of PM to the atmosphere shall not exceed **0.20** gram/kW-hr.
 - (b) The discharge of CO to the atmosphere shall not exceed 3.5 grams/kW-hr.
 - (c) The discharge of NMHC (non-methane hydrocarbon) + NO_X to the atmosphere shall not exceed **6.4** grams/kW-hr.
- (2) Exhaust opacity must not exceed: (40 CFR 60.4202(a)(2), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - (c) 50 percent during the peaks in either the acceleration or lugging modes.
- b. <u>Fuel Requirements</u> (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section V. Specific Operating Conditions (continued)

K. System 11 (continued)

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

- c. Monitoring Requirements (40 CFR 60.4209)

 If the CLICE does not meet the standards applicable to non-
 - If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))
- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **K.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **K.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs **K.5.d.(4)(a) through (c)** of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs **K.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **K.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **K.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - Emergency stationary ICE 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 paragraph **K.5.d.(4)(b)** of this section. Except as provided in paragraph **K.5.d.(4)(c)** of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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Section V. Specific Operating Conditions (continued)

K. System 11 (continued)

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

- d. <u>Compliance Requirements</u> (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - (5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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CLASS I AIR OUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

L. System 12

System 12	System 12 – Fire Pump Engines		Location UTM (Zone 11, NAD 83)		
System 12 -			m East		
S2.002	Fire Pump Engine 1	4,374,436	290,829		
S2.003	Fire Pump Engine 2	4,374,436	290,829		

- 1. Air Pollution Control Equipment (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. **S2.002 and S2.003, each,** have no add-on controls.
 - b. <u>Descriptive Stack Parameters for S2.002 and S2.003, each.</u>

Stack Height: 20.0 feet Stack Diameter: 0.66 feet Stack Temperature: 1,277 °F

- 2. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - a. S2.002 and S2.003, each, may consume only diesel and/or hydrotreated vegetable oil (HVO).
 - b. The sulfur content of the diesel and HVO, each, shall not exceed 0.0015 percent.
 - c. The maximum allowable fuel consumption rate for **S2.002 and S2.003**, each, shall not exceed **14.6 gallons** per hour, averaged over a calendar day, nor more than **1,460.0 gallons** per **12-month** rolling period of non-emergency use.
 - d. Hours
 - (1) S2.002 and S2.003, each, may operate a total of 24 hours per day.
 - (2) **S2.002 and S2.003, each,** may operate a total of **100** hours per year of non-emergency use. There is no time limit on operation in emergency situations.
 - (3) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from S2.002 and S2.003, each, the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.10** pounds per hour, nor more than **0.0052** 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 0.10 pounds per hour, nor more than 0.0052 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 0.10 pounds per hour, nor more than 0.0052 tons per 12-month rolling period.
- d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.0031 pounds per hour, nor more than 0.00015 tons per 12-month rolling period.
- The discharge of NOx (oxides of nitrogen) to the atmosphere shall not exceed 1.87 pounds per hour, nor more than 0.094 tons per 12-month rolling period.
- f. The discharge of NO_X (oxides of nitrogen) to the atmosphere from **Systems 01 through 13, combined**, shall not exceed the emission cap established in **Section VI** of this operating permit.
- g. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 0.31 pounds per hour, nor more than 0.016 tons per 12-month rolling period.
- h. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed **0.041** pounds per hour, nor more than **0.0021** tons per 12-month rolling period.
- i. NAC 445B.22017 The opacity from the \$2.002 and \$2.003, each, shall not equal or exceed 20 percent.
- j. NAC 445B.22047 The maximum allowable discharge of **sulfur** to the atmosphere from **S2.002 and S2.003**, **each**, shall not exceed **1.43** pounds per hour.



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Section V. Specific Operating Conditions (continued)

L. System 12 (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 consumption rate of **diesel and HVO**, **combined**, for each calendar day for **S2.002 and S2.003**, **each**, (in gallons) by multiplying the hourly fuel consumption rate as stated in **L.2.C.** of this section and the total daily hours of operation. The corresponding average hourly fuel consumption rate in gallons per hour as provided on the manufacturer's specification, to be kept onsite with records.
- b. Record the consumption rate of **diesel and HVO**, **combined**, in gallons, on a cumulative monthly basis, for each 12-month rolling period.
- c. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the diesel consumed in S2.002 and S2.003, each, shall not exceed the limit set forth in L.2.b. of this section.
- d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the HVO consumed in S2.002 and S2.003, each, shall not exceed the limit set forth in L.2.b. of this section.
- e. Monitor and record the total daily hours of operation for **S2.002 and S2.003**, **each**, for each calendar day of operation by use of a non-resettable run time meter. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
- f. Record the monthly hours of operation and the corresponding annual hours of operation for the year. 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 the year.
- 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>

New Source Performance Standards (NSPS) – 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

- a. <u>Emissions Standards</u> (40 CFR 60.4202, 40 CFR 60.4205)
 - The Permittee must comply with the emission standards in Table 4 of 40 CFR Part 60 Subpart IIII, for all pollutants, for the same model year and National Fire Protection Association (NFPA) maximum engine power. (40 CFR 60.4202(d), 40 CFR 60.4205(c))
 - (1) For a 2009 model year and later stationary fire pump engine: (40 CFR 60.4202(d), 40 CFR 4205(c), Table 4)
 - (a) The discharge of PM to the atmosphere shall not exceed 0.20 gram/kW-hr (0.15 gram/hp-hr).
 - (b) The discharge of non-methane hydrocarbon (NMHC) + NO_X to the atmosphere shall not exceed **4.0** grams/kW-hr (**3.0** grams/hp-hr).
 - (c) The discharge of carbon monoxide (CO) to the atmosphere shall not exceed 3.5 grams/kW-hr (2.6 gram/hp-hr).
- b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.
- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)

If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))





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Section V. Specific Operating Conditions (continued)

L. System 12 (continued)

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

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **I.5.d.(5)** of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **I.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE 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 paragraphs I.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs I.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 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **I.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **I.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - Emergency stationary ICE 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 owner or operator 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 ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE 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 paragraph I.5.d.(4)(b) of this section. Except as provided in paragraph I.5.d.(4)(c) of this section, the 50 hours per calendar 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 60.4211(f)(3))
 - i. 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 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))



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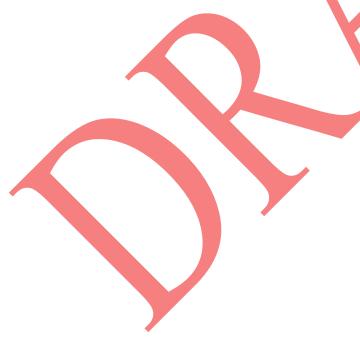
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Section V. Specific Operating Conditions (continued)

- L. System 12 (continued)
 - 5. <u>Federal Requirements</u> (continued)

- d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - 5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than or equal to 100 HP and less than or equal to 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. (40 CFR 60.4211(g)(2))
- e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))



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Section V. Specific Operating Conditions (continued)

M. System 13

System 12	Plaam Enaugy Camyon	Location UTM (Zone 11, NAD 83)		
System 13 -	System 13 – Bloom Energy Server		m East	
PF1.001	Bloom Solid Oxide Fuel Cell ES01	4,374,822	291,388	
PF1.002	Bloom Solid Oxide Fuel Cell ES02	4,374,821	291,386	
PF1.003	Bloom Solid Oxide Fuel Cell ES03	4,374,820	291,384	
PF1.004	Bloom Solid Oxide Fuel Cell ES04	4,374,819	291,391	
PF1.005	Bloom Solid Oxide Fuel Cell ES05	4,374,817	291,389	
PF1.006	Bloom Solid Oxide Fuel Cell ES06	4,374,816	291,387	

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.3405)
 - a. **PF1.001 through PF1.006, each,** have no add-on controls.
- 2. Operating Parameters (NAC 445B.3405)
 - a. PF1.001 through PF1.006, each, may consume only natural gas.
 - b. The maximum allowable fuel consumption rate for PF1.001 through PF1.006, combined, shall not exceed 9,946,250.0 standard cubic feet (scf) per month, nor more than 119,355.000.0 standard cubic feet (scf) per 12-month rolling period.
 - c. The maximum allowable power output for PF1.001 through PF1.006, combined, shall not exceed 1.95 megawatts (kW) per hour, averaged over a calendar day.
 - d. Hours
 - (1) PF1.001 through PF1.006, 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 **PF1.001 through PF1.006, combined,** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.035** pounds per hour, nor more than **0.16** 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 0.035 pounds per hour, nor more than 0.16 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 0.035 pounds per hour, nor more than 0.16 tons per 12-month rolling period.
- d. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed 0.0059 pounds per hour, nor more than 0.026 tons per 12-month rolling period.
- e. The discharge of NO_X (oxides of nitrogen) to the atmosphere from Systems 01 through 13, combined, shall not exceed the emission cap established in Section VI of this operating permit.
- The discharge of CO (carbon monoxide) to the atmosphere shall not exceed **0.025** pounds per hour, nor more than **0.11** tons per 12-month rolling period.
- g. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.020 pounds per hour, nor more than 0.085 tons per 12-month rolling period.
- h. NAC 445B.22017 The opacity from the PF1.001 through PF1.006, each, shall not equal or exceed 20 percent.



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Section V. Specific Operating Conditions (continued)

M. System 13

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 consumption rate of **natural gas**, in scf, for **PF1.001 through PF1.006**, **combined**, on a monthly basis, by use of flow meter.
- b. Record the consumption rate of **natural gas**, in scf, on a cumulative monthly basis, for each 12-month rolling period.
- c. Monitor and record the power output for each calendar day for **PF1.001 through PF1.006**, **combined** (in megawatts) by use of a power meter.
- d. Monitor and record the hours of operation for PF1.001 through PF1.006, each, for each calendar day.

****End of Specific Operating Conditions****



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Section VI. Emission Caps

- A. Operating Parameters (NAC 445B.3365(3)) (Federally Enforceable SIP Requirement)
 - 1. Hours
 - (a) All emission units in Systems 01 through 10 and 12, combined, may operate a total of 9,979 hours per year of nonemergency use. There is no time limit on operation in emergency situations.
- B. <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 **Systems** 01 through 13, combined, the following pollutants in excess of the following specified limits:

- 1. The discharge of NO_X (oxides of nitrogen) to the atmosphere shall not exceed 247.97 tons per 12-month rolling period.
- C. <u>Monitoring, Recordkeeping and Reporting</u> (NAC 445B.3405)
 - 1. Monitor and record the total daily hours of operation for all emission units in Systems 01 through 10, combined, for each calendar day of operation by use of the engine control module (ECM). The Permittee shall note which hours of operation are emergency hours, as which hours of operation are hours of non-emergency use.
 - 2. Monitor and record the total daily hours of operation for **all emission units in System 12** for each calendar day of operation by use of a non-resettable run time meter. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.

****End of Emission Caps****





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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section VII. Surface Area Disturbance Conditions

The surface area disturbance for **Silver Slate**, **LLC** is < 5 acres.

A. Fugitive Dust (NAC 445B.22037)

- 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.
- 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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Issued to: Silver Slate, LLC (As Permittee)

Section VIII. Schedules of Compliance

A. Opacity Compliance Demonstration and Performance Tests

1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.3365, the Permittee, upon issuance of this operating permit, shall conduct and record opacity compliance demonstrations and/or performance tests within 12 months. The Permittee shall follow the test methods and procedures referenced in Table VIII-1 and Table VIII-2 below:

Table VIII-1: Opacity Compliance Demonstration					
System	Number of Emission Units To Be Tested	Pollutant To Be Tested	Testing Methods/Procedures		
System 01 – Group 1 Emergency Generators	2	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 02 – Group 1a Emergency Generators	2	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 03 – Group 1b Emergency Generators	2	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 04 – Group 1b Emergency Generators	2	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 05 Group 1b Emergency Generators		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.		

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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Section VIII. Schedules of Compliance (continued)

A. Opacity Compliance Demonstration and Performance Tests (continued)

	Table VIII-1: Opacity Compliance Demonstration					
System Emission Units To Be		Pollutant To Be Tested	Testing Methods/Procedures			
System 08 – Group 2 Emergency Generators	1	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 09 – Group 2a Emergency Generators	1	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 10 – Group 2b Emergency Generators	1	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 12 – Fire Pump Engines	1	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.			





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Section VIII. Schedules of Compliance (continued)

A. <u>Opacity Compliance Demonstration and Performance Tests</u> (continued)

Table VIII-2: Performance Demonstration				
System	System Number of Emission Units To Be Tested Pollutant To Be Tested		Testing Methods/Procedures	
	2	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 01 –			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.	
Group 1 Emergency Generators		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.	
		NOx	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.	
		СО	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.	
		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 02 –	2 P		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.	
Group 1a Emergency Generators		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.	
		NO_X	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.	
		СО	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.	



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Section VIII. Schedules of Compliance (continued)

A. Opacity Compliance Demonstration and Performance Tests (continued)

	Table VIII-2: Performance Demonstration				
System	Number of Emission Units To Be Tested 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 03 –			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.		
Group 1b Emergency Generators	2	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.		
		NO _X	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.		
		СО	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.		
		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 04 –	2		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.		
Group 1b Emergency Generators		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.		
		NO _X	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.		
		СО	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.		



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Section VIII. Schedules of Compliance (continued)

A. Opacity Compliance Demonstration and Performance Tests (continued)

Table VIII-2: Performance Demonstration					
System	System Number of Emission Units To Be Tested 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 05 –			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.		
Group 1b Emergency Generators	1	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.		
		NO _X	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.		
		СО	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.		
		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 08 –	1		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.		
Group 2 Emergency Generators		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.		
		NO _X	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.		
		СО	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.		



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Section VIII. Schedules of Compliance (continued)

A. Opacity Compliance Demonstration and Performance Tests (continued)

Table VIII-2: Performance Demonstration				
System Number of Emission Units To Be Tested Tested		To Be	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 09 –			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.	
Group 2a Emergency Generators	1	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.	
		NO _X	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.	
		СО	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.	
		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 10 –	PM ₁₀		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.	
Group 2b Emergency Generators		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.	
		NO _X	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.	
		СО	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.	



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Section VIII. Schedules of Compliance (continued)

- A. Opacity Compliance Demonstration and Performance Tests (continued)
 - 2. 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))
 - 3. Testing shall be conducted on the exhaust stack (post controls).
 - 4. Opacity compliance demonstrations and performance tests in **Table VIII-1 and Table VIII-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 opacity compliance demonstrations and performance tests. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of the opacity compliance demonstrations and performance tests unless otherwise specified in the applicable standard. (NAC 445B.252(3))
 - 5. The Permittee shall give notice to the Director 30 days before the opacity compliance demonstrations and 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 opacity compliance demonstrations and 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 opacity compliance demonstrations and performance tests contained in **Table VIII-1** and **Table VIII-2** above, 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. Opacity compliance demonstrations and 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 opacity compliance demonstrations and performance tests sufficient to provide adequate compliance demonstration. Should the Director determine that the opacity compliance demonstrations and performance tests do not provide adequate compliance demonstration, the Director may require additional testing.

****End of Schedule of Compliance ****

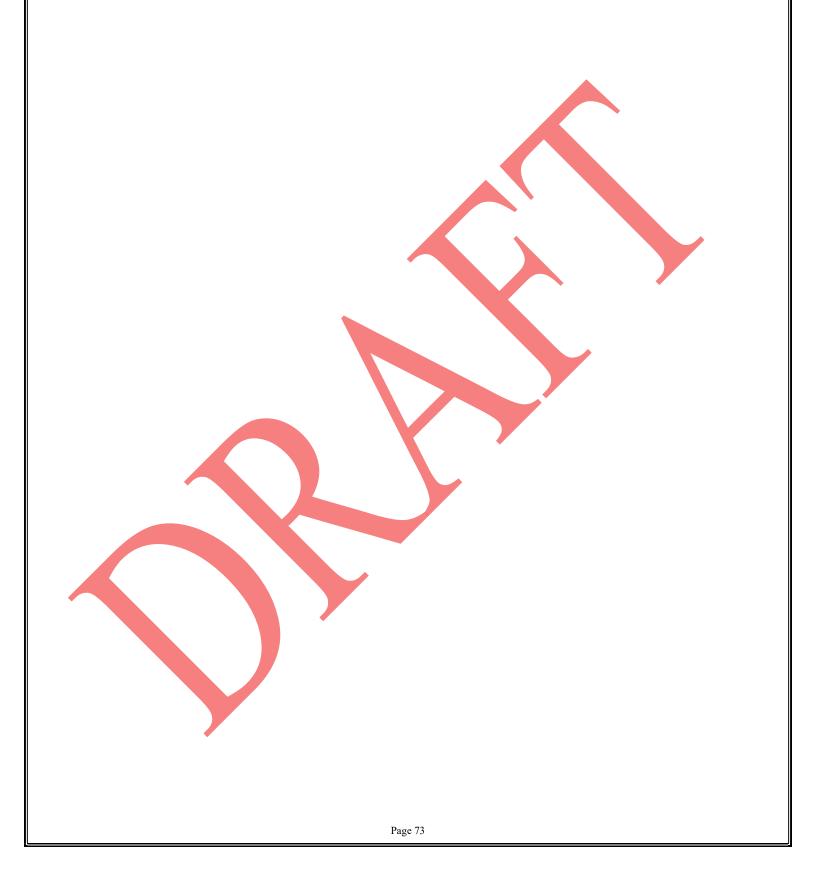




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Section IX. Amendments

This Permit to construct:

- 1. Is non-transferable. (NAC 445B.287)
- 2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318)
- 3. Will expire if construction is not commenced within 18 months after the date of issuance or if construction of the facility is delayed for 18 months after initiated. (NAC 445B.3366)
- 4. Will expire if a complete application for a Class I operating permit or modification of an existing Class I operating permit is not submitted within 12 months after the initial start-up. (NAC 445B.3366)
- 5. 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)
- 6. The Permittee shall submit a complete Class I application within 12 months after the notification date of commencement of operation as required in this permit to construct. (NAC 445B.3361)

Signature:	Jaimie Mara Supervisor, Permitting Bureau of Air Pollutio		
Phone:	(775) 687- 9343	Date:	DRAFT

dr xx/xxxx



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Issued to: SILVER SLATE, LLC (AS PERMITTEE)

Class I OPTC Non-Permit Equipment List

Appended to Permit #AP7374-4671

Emission Unit #	Emission Unit Description
IA1.001	Group 1 Small Natural Gas Fired Building Heater RTU 1A-F-R-1 (0.294 MMBtu/hr)
IA1.002	Group 1 Small Natural Gas Fired Building Heater RTU 1A-F-R-2 (0.294 MMBtu/hr)
IA1.003	Group 2 Small Natural Gas Fired Building Heater RTU 1A-DC-R-1 (0.90 MMBtu/hr)
IA1.004	Group 2 Small Natural Gas Fired Building Heater RTU 1A-DC-R-2 (0.90 MMBtu/hr)

