

Guidance Document

for the

Class II General Air Quality Operating Permit for Concrete Batch Plants Application Form



Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class II Permitting Branch
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701-5249
Phone (775) 687-9349

October 2017



The goal of the Bureau of Air Pollution Control is to achieve and maintain levels of air quality that will protect human health, prevent injury to plant and animal life, prevent damage to property, and preserve the scenic, historical, and aesthetic treasures of the State.

NDEP



Table of Contents

<u>Acronyms and Abbreviations</u>	5
1.0 <u>INTRODUCTION</u>	6
1.1 <u>Application Submittal and Processing Timeline</u>	6
2.0 <u>COVER PAGE</u>	6
2.1 <u>Facility Name</u>	6
2.0 <u>COVER PAGE (continued)</u>	7
2.2 <u>Existing Facility ID</u>	7
2.3 <u>Existing Class II General AQOP for Concrete Batch Plants</u>	7
2.4 <u>Application Type</u>	7
3.0 <u>IMPORTANT INFORMATION</u>	7
4.0 <u>GENERAL COMPANY INFORMATION</u>	7
4.1 <u>Company Name and Address</u>	7
4.2 <u>Owner’s Name and Address</u>	7
4.3 <u>Facility Name and Address</u>	7
4.0 <u>GENERAL COMPANY INFORMATION (continued)</u>	8
4.4 <u>Records Location</u>	8
4.5 <u>Responsible Official Name and Address</u>	8
4.6 <u>Plant Manager or Other Appropriate Contact</u>	8
4.7 <u>Location and Driving Directions to the Facility</u>	8
5.0 <u>CLASS 2 GENERAL PERMIT SPECIAL USE AREA</u>	9
6.0 <u>EMISSION FACTORS</u>	9
7.0 <u>EMISSION LIMITS</u>	9
8.0 <u>EMISSION UNIT FORMS</u>	9
8.1 <u>Form 1A – Emission Unit List: Particulate Emissions (PM) Calculation Form</u>	9



Table of Contents (continued)

8.0	<u>EMISSION UNIT FORMS (continued)</u>	10
8.2	<u>Form 1B – Special Use Area Additional Information</u>	10
8.3	<u>Form 1C – Special Use Area Additional Information</u>	11
9.0	<u>SURFACE AREA DISTURBANCE</u>	11
10.0	<u>PROCESS NARRATIVE</u>	11
11.0	<u>PROCESS FLOW DIAGRAM(S)</u>	11
12.0	<u>LOCATION MAP(S)</u>	12
13.0	<u>REQUEST CERTIFICATION DOCUMENT</u>	12
<u>Appendix 1: Example of Form 1A – Emission Unit List: Particulate Emissions (PM) Calculation</u>		
	<u>Form</u>	13
<u>Appendix 2: Example of Form 1B – Special Use Area Additional Information</u>		14
<u>Appendix 3: Example of Form 1C – Special Use Area Additional Information</u>		15



Acronyms and Abbreviations

The acronyms and abbreviations identified below are used throughout this document. This list is intended for reference use.

Administrator	Administrator of EPA as defined in NAC 445B.004
ACFM	Actual Cubic Feet per Minute
AQOP	Air Quality Operating Permit
BAPC	Bureau of Air Pollution Control
CFR	Code of Federal Regulations
CO	Carbon Monoxide
Director	Director of Nevada State Department of Conservation and Natural Resources as defined in NAC 445B.053
EF	Emission Factor
EPA	Environmental Protection Agency
FIN	Facility Identification Number
HA	Hydrographic Area (Basin)
hr	Hour
L x W x H	Length x Width x Height
lb	Pound
N/A	Not Applicable
NAC	Nevada Administrative Code
NAD 83	North American Datum of 1983
NDEP	Nevada Division of Environmental Protection
NO _x	Oxides of Nitrogen
NRS	Nevada Revised Statutes
ODS	Official Date of Submittal
PF 1.XXX	Emission Unit Number where 'PF' designates emissions are 'Process Fugitive'
PM	Particulate Matter
PM ₁₀	Particulate Matter with an Aerodynamic Diameter Less Than or Equal to 10 Micrometers
PM _{2.5}	Particulate Matter with an Aerodynamic Diameter Less Than or Equal to 2.5 Micrometers
PTE	Potential to Emit
RO	Responsible Official
S 2.XXX	Emission Unit Number where 'S' designates emissions are coming from a 'Stack'
SO ₂	Sulfur Dioxide
USC	United States Code
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compounds



1.0 INTRODUCTION

The purpose of this document is to provide guidance for filling out the Class II General Air Quality Operating Permit (AQOP) For Concrete Batch Plants Application Form (Application).

When completing the Application, complete each item or explain in the space provided why no information is supplied. Specify "N/A" (Not Applicable) if necessary. Fields that are left blank may cause a delay in the processing time.

1.1 Application Submittal and Processing Timeline

The Application and appropriate fee may be mailed or hand delivered to the Nevada Division of Environmental Protection – Bureau of Air Pollution Control (BAPC). In addition, fees can be submitted either by check or online using ePayment, <https://epayments.ndep.nv.gov/>. In order for the BAPC to start processing the Application, both a signed Application and fee must be received in accordance with [NAC 445B.327](#).

Make sure the Application contains the original signature of the Responsible Official (RO) on the Certification Document page in the Application packet. When submitting an electronic payment, please make sure to include facility name and if applicable, existing permit number and/or Facility Identification Number (FIN). If you have any questions, you may contact the BAPC at (775) 687-9349.

The BAPC mailing address is:

Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class II Permitting Branch
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701-5249

The Application and fee are date stamped when they are received by the BAPC. In accordance with [NAC 445B.3457](#), the BAPC has 10 working days to determine if the application is complete or incomplete. The day the application is deemed complete is the Official Date of Submittal (ODS). After the ODS, the regulatory timeline for the BAPC to issue a Class II General AQOP is 60 calendar days in accordance with [NAC 445B.3457.3](#).

2.0 COVER PAGE

The Cover Page is the first page of the application where basic information is identified as to if the facility is new or existing and what type of application is being submitted.

2.1 Facility Name

Many companies have several facilities; please include the facility name that houses the equipment. If you do not have a facility name, please put the company name here. The company name will also be requested on page 3 of the application.



2.0 COVER PAGE (continued)

2.2 Existing Facility ID

Existing Facility ID is the Facility Identification Number (FIN) for facilities that currently have a permit. On existing operating permits the FIN is located in the header section as Facility ID No. AXXXX for example: A1234. If you do not currently have a permit, specify “N/A”.

2.3 Existing Class II General AQOP for Concrete Batch Plants

Existing Class II General AQOP for Concrete Batch Plants refers to the existing permit number located in the header section, for example Permit No. AP1499-3576. If you do not currently have a permit, specify “N/A”.

2.4 Application Type

The Application can be submitted for a new permit, a revision to an existing permit, or for the renewal of an existing permit. Check all boxes that apply for the permitting action.

3.0 IMPORTANT INFORMATION

The application contains a section entitled Important Information. The applicant should be familiar with this information provided in this section prior to completing the application.

4.0 GENERAL COMPANY INFORMATION

The General Company Information Form requests the contact and mailing information of the company, RO, plant manager or other appropriate contact, as well as the location of and accurate driving directions to the facility.

4.1 Company Name and Address

Provide the company name and address as you want it to appear on the permit. If a company applying for a permit is owned by another company, be sure to insert the information you want on the permit.

4.2 Owner’s Name and Address

Provide the name and address of the owner of the company. Owner means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

4.3 Facility Name and Address

Provide the facility name and address if it is different than the company name and address described under the company name and address or write in “same as above”.



4.0 GENERAL COMPANY INFORMATION FORM (continued)

4.4 Records Location

Provide the location where all records required by the permit will be stored. If they will be on site, insert the information used for the facility name and address. If they will be stored at another location, insert the information for the location.

4.5 Responsible Official Name and Address

Provide the name, title, and mailing address for the RO. This person should be the same as what the BAPC already has on file. If a change needs to be made, please attach a letter stating who the new RO will be, signed by the appropriate individual. In accordance with [NAC 445B.156](#) the RO can be:

1. For a corporation:
 - (a) A president;
 - (b) A vice president in charge of a principal business function;
 - (c) A secretary;
 - (d) A treasurer; or
 - (e) An authorized representative of such a person who is responsible for the overall operation of the facility and who is designated in writing by an officer of the corporation and approved in advance by the Director.
2. For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
3. For a municipality or a state, federal or other public agency, a ranking elected official or a principal executive officer, including, for a federal agency, a chief executive officer who has responsibility for the overall operations of a principal geographic unit of the agency.
4. For an affected source, the designated representative or his or her alternate, as defined in [42 U.S.C. § 7651a\(26\)](#).

4.6 Plant Manager or Other Appropriate Contact

Provide the name, title, and contact information for a plant manager or other appropriate contact from the facility if it will not be the RO. This is the person the BAPC will communicate with when on site, if the RO is not available. For example, if the company president is the RO but is not physically at the facility, provide an appropriate contact that is physically located at the facility.

4.7 Location and Driving Directions to the Facility

Provide the Township(s), Range(s) and Section(s) of the facility, as well as the Universal Transverse Mercator (UTM) coordinates of the front gate of the facility. The UTM coordinates must be in metric units using the North American Datum of 1983 (NAD 83), Zone 11. Describe the location of the facility with respect to the nearest road and city (such as 8th Street, Wells, Nevada), the County the facility is located in, and accurate driving directions from the nearest city to the facility.



5.0 CLASS 2 GENERAL PERMIT SPECIAL USE AREA

This describes the areas where exceptions and additional requirements apply to applicants applying for the Class II General AQOP for Concrete Batch Plants.

6.0 EMISSION FACTORS

This lists the emission factors that the applicant may choose from. No other emission factors are allowed for the Class II General AQOP for Concrete Batch Plants.

Please note that there are no ‘controlled’ emission factors for ‘Cement Silo Unloading’ and ‘Weigh Hopper Loading’. If the emission units being permitted are enclosed, a control efficiency of 50% may be used as long as ‘enclosure’ is specified as the control device.

7.0 EMISSION LIMITS

This lists the emission limits that a facility must comply with in order to operate under the Class II General AQOP for Concrete Batch Plants. If a facility cannot operate under these limits, a Class II Air Quality Operating Permit must be applied for and issued prior to operation.

8.0 EMISSION UNIT FORMS

8.1 Form 1A – Emission Unit List: Particulate Emissions (PM) Units Calculation Form

This is used to calculate PM/PM₁₀/PM_{2.5} emissions for all emission units. Please see Appendix 1 for a completed example.

1. List all emission units and corresponding emission unit identifier. Use additional pages if necessary.
2. Specify the control device.
3. Provide requested hourly throughput (tons/hour) for each emission unit.
4. Provide the total estimated tons of material processed for each respective unit for the entire job/project.
5. Specify the maximum daily hours you intend to operate. For Concrete Batch Plants there are four available hour options: 8, 12, 16, and 24. No other hour options may be used.
6. Specify the appropriate emission factor for PM, PM₁₀, and PM_{2.5} as listed in the Emission Factor table in the Class II General Air Quality Operating Permit For Concrete Batch Plants Application Form. Please note that there are no ‘controlled’ emission factors for ‘Cement Silo Unloading’ and ‘Weigh Hopper Loading’. If the emission units being permitted are enclosed, a control efficiency of 50% may be used as long as ‘enclosure’ is specified as the control device.
7. Calculate and enter the projected PM, PM₁₀, and PM_{2.5} emissions in lbs/day and tons/job for each emission unit.



8.0 EMISSION UNIT FORMS (continued)

8.2 Form 1B – Special Use Area Additional Information

This form is to only be used if an Application is being made in Hydrographic Basin (HA) 83 – Tracy Segment. This form provides the additional information that the BAPC will need to conduct an environmental evaluation. Please see Appendix 3 for a completed example. Definitions of the required additional parameters are below.

Emission Unit Description

The description of the emission unit (i.e. ‘Loader to Feed Hopper’ or ‘Conveyor 1 transfer to Conveyor 2’).

Emission Unit Identifier

The name associated with the emission unit (i.e. ‘Conveyor 1’).

UTM Coordinates

The specific UTM coordinates for each emission unit. The UTM coordinates must be in metric units using North American Datum of 1983 (NAD 83), Zone 11.

Release Height

The release height is the distance from the top of the emission unit to ground level.

Drop Length

The drop length is how far material falls from one emission unit to the next emission unit (i.e. such as from a conveyor to crusher or stockpile, or a screen to a conveyor).

Emission Unit Dimensions

The physical dimensions of an emission unit. For example, a feed hopper would be 8 feet long x 6 feet wide x 7 feet high (8x7x6) and a conveyor would be 3 feet wide x 4 feet high (3x4). The height dimension should match the Release Height (Letter E in Form 1C).

Stack Height

Provide the height of the stack in feet (i.e. the height of the stack on the baghouse controlling the HMA Plant).

Stack Inside Diameter

Provide the inside diameter of the stack in feet. If the diameter is non-cylindrical, provide the actual dimensions (LxW).

Stack Flow Rate (acfm)

Provide the gas volume flow rate through the stack measured in actual cubic feet per minute (acfm).



8.0 EMISSION UNIT FORMS (continued)

8.3 Form 1B – Special Use Area Additional Information (continued)

Stack Exit Velocity

Provide the exit velocity of the of the exhaust gas from the stack measured in feet per second (ft/sec).

Stack Temperature

Provide the temperature of the stack exhaust in degrees Fahrenheit.

Start Time

You may request to operate certain hours of the day. If you choose to do so, provide your start time in this section. Conditions will be written into the permit accordingly.

End Time

You may request to operate certain hours of the day. If you choose to do so, provide your end time in this section. Conditions will be written into the permit accordingly.

8.4 Form 1C – Special Use Area Additional Information

This form is to only be used if an Application is being made in Hydrographic Basin (HA) 83 – Tracy Segment. This form provides the additional information that the BAPC will need to conduct an environmental evaluation. Please see Appendix 4 for a completed example.

9.0 SURFACE AREA DISTURBANCE

A separate Surface Area Disturbance (SAD) Permit is required if 5 or more acres of land will be disturbed.

10.0 PROCESS NARRATIVE

Provide a detailed description of all processes and flow of material in the Application (i.e. Conveyor C-5 (PF1.006) transfers aggregate to Crusher CR-2 (PF1.007)).

11.0 PROCESS FLOW DIAGRAM(S)

The Process Flow Diagram is the schematic showing how all processes are interconnected. In the detailed process flow diagram indicate emission control application points, throughput rates, and emission unit identifiers and system notations for clarification purposes.



12.0 LOCATION MAP(S)

Provide all required maps as visible and readable printouts. The maps may be in color. Submit the following maps:

1. A vicinity map that shows the facility location with respect to the nearest known city, town, and major road, all labeled. Outline the facility.
2. Topographic Map (or similar satellite-image map) indicating the exact location of equipment.

13.0 REQUEST CERTIFICATION DOCUMENT

The last page of the Application is the Application Certification Document, which is a summary of the required documents for the Application. Check the boxes next to the items that are applicable. It must be signed with an original “wet” signature by the RO of the company or facility.



Appendix 1: Example of Form 1A – Application Emission Unit List: Particulate Emissions (PM) Units Calculation Form³

Source #	Source Description	Minimum Setback	Material Process Rate	Operating Hours	Air Pollution Controls	Emission Factor, lb/ton			Calculated PM Emissions	Calculated PM ₁₀ Emissions	Calculated PM _{2.5} Emissions
		meters	tons/hr	hrs/day		PM	PM ₁₀	PM _{2.5}	lb/day	lb/day	lb/day
A	B	C	D	E	F	G	H	I	J (=D*E*G)	K (=D*E*H)	L (=D*E*I)
System 1 - Concrete Batch Plant											
PF1.001	Loader transfer to Feeder 1	10	100	12	N/A	3.00E-03	1.10E-03	1.70E-04	3.60	1.32	0.20
PF1.002	Feeder 1 transfer to Conveyor 1	10	100	12	Wet Dust Suppression	7.50E-04	2.80E-05	4.00E-05	0.90	0.03	0.05
PF1.003	Loader transfer to Feeder 2	10	100	12	N/A	3.00E-03	1.10E-03	1.70E-04	3.60	1.32	0.20
PF1.004	Feeder 2 transfer to Conveyor 1	10	100	12	Wet Dust Suppression	7.50E-04	2.80E-05	4.00E-05	0.90	0.03	0.05
PF1.005	Conveyor 1 transfer to weigh hopper 1	10	100	12	N/A	4.80E-03	2.80E-03	4.00E-04	5.76	3.36	0.48
PF1.006	Weigh hopper 1 discharge to truck	10	10	12	Wet Dust Suppression	9.80E-02	2.63E-02	4.00E-03	11.76	3.16	0.48
S2.001	Cement silo loading from delivery truck	10	80	12	Bin Vent	9.90E-04	3.40E-04	5.00E-05	0.95	0.33	0.05
PF1.007	Cement silo unloading to weigh hopper	10	10	12	N/A	4.80E-03	2.80E-03	4.00E-04	0.58	0.34	0.05
Total ²									28.05	9.89	1.56
Emission Limits ²									31.75	19.98	1.67
Footnotes: (1) The Emission Factors as stated in this application must be used.											
(2) The total of PM, PM ₁₀ , and PM _{2.5} emissions combined for all units must not exceed the limits established for the minimum setback and hours of operation that are being requested.											
(3) Use additional forms as necessary.											



Appendix 2: Example of Form 1B – Special Use Area Additional Information¹

Emission Unit Description	Emission Unit Identifier	UTM Coordinates (NAD 83, Zone 11)		Release Height (ft)	Drop Length (ft)	Emission Unit Dimensions L x W x H (ft)	Stack Height (ft)	Stack Inside Diameter or L x W Dimensions (ft)	Stack Flow Rate (acfm)	Stack Exit Velocity (ft/sec)	Stack Temperature (°F)	Requested Hours of Operation	
		Easting (m)	Northing (m)									Start Time (AM/PM)	End Time (AM/PM)
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Loader transfer to Feeder 1	PF1.001	294279	4371981	8	2	8x6x8	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Feeder 1 transfer to Conveyor 1	PF1.002	294278	4371973	4	1	3x4	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Loader transfer to Feeder 2	PF1.003	294277	4371958	8	2	6x8x10	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Feeder 2 transfer to Conveyor 1	PF1.004	294262	4371962	4	1	3x4	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Conveyor 1 transfer to weigh hopper 1	PF1.005	294228	4371972	12	1	3x30	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Weigh hopper 1 discharge to truck	PF1.006	294275	4371943	10	1	2 x 2	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Cement silo loading from delivery truck	S2.001	294273	4371933	N/A	N/A	N/A	40	2 x 2	1200	40	ambient	5:00 AM	5:00 PM
Cement silo unloading to weigh hopper	PF1.007	294250	4371929	12	1	3x4	N/A	N/A	N/A	N/A	N/A	5:00 AM	5:00 PM
Footnote: (1) Use additional forms as necessary.													



Appendix 3: Example of Form 1C – Special Use Area Additional Information

Corner Number	Corner Location of Fence Line Boundary for the proposed Change of Location	
	UTM Easting (m) (NAD 83, Zone 11)	UTM Easting (m) (NAD 83, Zone 11)
A	B	C
1	294264	4372126
2	294512	4371987
3	294055	4371938
4	294323	4371750