**STATE OF ALASKA**

**Dept. of Environmental Conservation**

**Division of Air Quality/ Air Permits Program**

**Minor General Permit 3 (MG3) Application**

**for**

**Hot Mix Asphalt Plants**

|  |  |
| --- | --- |
| **For Department Use Only** | Permit No.:\_\_Click here to enter text.\_\_ |
| Reviewed by:\_Click here to enter text.\_\_ | Date Reviewed:\_Click here to enter text.\_\_ |
| Complete  Incomplete  Does Not Qualify (specify):\_ Click here to enter text. \_ | |

This application is for a Title I Minor General Permit 3 (MG3) for a hot mix asphalt plant with a rated capacity of at least 5 tons per hour, and emits less than 100 tons of a regulated pollutant[[1]](#footnote-1) per year (TPY).

Alaska law requires an owner or operator obtain a minor permit under 18 AAC 50.502(b)(1) before construction, operation, or relocation of a stationary source containing an asphalt plant with a rated capacity of at least five tons per hour.

Alaska law allows the owner/operator to satisfy the need for a minor permit under 18 AAC 50.502(b) with a general minor permit issued under 18 AAC 50.560.

Note that a source with Potential to Emit (PTE) of a regulated air pollutant greater than 100 TPY needs a Title V operating permit. Regulated pollutant has the meaning given in 40 C.F.R. 71.2.

To determine the PTE of your stationary source, complete the worksheet in *Attachment 2: Determining Potential to Emit (PTE)*, or the *MG3 Potential to Emit Spreadsheet* on the Department’s general permit website.[[2]](#footnote-2)

To obtain an MG3 permit, you must ***complete this application in full***and send it along with the appropriate application fee to:

**Alaska Department of Environmental Conservation**

**Air Permits Program**

**555 Cordova St.**

**Anchorage, AK 99501**

The administrative fee for this application is not listed with other Air Quality Control administrative fees in 18 AAC 50.400(d). Contact the Department’s Air Quality Division (907-465-5100) for the current fee, or check the MG3 and MG9 fee page available on the Department’s general permit website.2 *Note: Fees are subject to change.*

If the owner/operator of this stationary source would like to **remediate soils using the asphalt plant**, the owner must also apply for an air quality control minor permit for that activity.

If the owner/operator would like to operate a **rock crusher** and is applying for a MG3 for asphalt plants, they will need to apply for a separate Minor General Permit 9 (MG9) for rock crushing plants in addition to the MG3. They may apply for the General Permit 3 (GP3) for asphalt plants depending upon the size of the asphalt plant. Both applications are available on the Department’s general permits website.[[3]](#footnote-3)

***Application Completion and Review Process***

You will be notified within 60 days after receipt of the application if your application is complete and if you qualify for the MG3. After your application is determined complete, you will be sent an authorization to operate under the MG3.

By completing this application, the owner or operator acknowledges that the asphalt plant operated under this permit is required to be operated with a fugitive dust control plan to control fugitive particulate (PM) emissions.

Please fill out the completion checklist below before submitting the application to the Department.

|  |
| --- |
| **Completion Checklist:** |
| Qualifying Criteria (Section 1) filled out completely  Stationary Source Identification (Section 3) filled out completely  Stationary Source Physical Address  Permittee name and contact information  Responsible Official name and contact information  Billing Contact name and contact information  Stationary Source Information (Section 4) filled out completely  Asphalt Plant information  Pollution Control Equipment information  Diesel Engine(s) information  Equipment summary  Copy of most recent particulate matter source test results attached to application  OR manufacturer specifications showing that plant meets grain-loading standards  OR this facility will be tested within 30 operating days after receiving your letter of authorization.  Diesel Engine manufacturer certifications attached to application (if applicable)  Process Flow Diagram attached to application  All items from Equipment List included  Observable emission point(s) marked  Operation and Maintenance Plan attached to application  Fugitive Dust Control Plan attached to application  Potential to Emit (PTE) table (Section 10 Table A) filled out completely  Calculations attached (if applicable)  Assessable Emissions Estimates (Attachment 4) filled out completely  Certification statement signed by the Responsible Official |

**Every box in the checklist above must be checked, with necessary documents attached, in order for this application to be considered complete** (unless the box description is followed by “if applicable”). If the application is not completely filled out with all necessary documents attached, the department will return the application for completion by the applicant. The application will only be approved if all qualifying criteria are met, and the application is complete.

# Section 1: Qualifying Criteria

1. **Pollution Control Equipment.**

Your Hot Mix Asphalt Plant will require either a baghouse and/or venturi wet scrubber to control particulate emissions (PM). If you cannot check one of the boxes below, you do not qualify for an MG3 permit. Please contact ADEC.

|  |  |
| --- | --- |
| **Check all that apply:** | |
|  | This hot mix asphalt plant operates with a BAGHOUSE. |
|  | This hot mix asphalt plant operates with a WET SCRUBBER. |

1. **Exclusions**

Please fill out the table below. If you answered “**Yes**” to any of the questions, then you do not qualify for an MG3 Permit. Please contact ADEC.

|  |  |  |
| --- | --- | --- |
| **Yes** | **No** | **Criteria** |
|  |  | 1. Does the stationary source have a stationary source-specific requirement?   *Stationary source-specific requirements are restrictions on operations that usually allow the stationary source to avoid an applicable requirement. Examples include limits on hours of operation or fuel combustion. These limits are found in the current permit for your stationary source.* |
|  |  | 1. Does the stationary source conduct open burning? |
|  |  | 1. Does the stationary source contain asbestos demolition or renovation? |
|  |  | 1. Does the stationary source contain servicing of refrigeration equipment containing Class I or Class II substances? |
|  |  | 1. Does the stationary source contain a gas turbine? |
|  |  | 1. Does the stationary source contain an incinerator? |
|  |  | 1. Does the stationary source have the potential to emit more than 100 tons per year of a regulated air pollutant (i.e. is it subject to Title V requirements)? |
|  |  | 1. Will the asphalt plant operate at the same location as a Title V permitted source?   *If you check “Yes”, contact ADEC for more information.* |

1. **Diesel Generator** **(check one)**

 This asphalt plant facility will utilize a **stationary** diesel generator(s) to provide electrical power.

*If you checked the box above, please answer the following questions. If you answer “****No****” to any of the* *following questions, then you do not qualify for an MG3 permit. Please contact ADEC.*

|  |  |  |
| --- | --- | --- |
| **Yes** | **No** | **Criteria** |
|  |  | 1. Will the stationary diesel engine(s) have a combined rating of less than 2,280 bhp? |
|  |  | 1. For diesel engine(s) larger than 500 kW (~650 hp), is the engine’s exhaust stack height higher than 12 feet, as measured from the ground and does it exhaust unrestricted vertically? |

 This asphalt plant facility will utilize a diesel generator(s) to provide electrical power, but the diesel generator(s) meets the definition of a **nonroad engine**[[4]](#footnote-4)under 40 C.F.R. 1068.30 Nonroad Engine-(1)(iii) and will not remain at the same location for more than 12 months.

 This asphalt plant facility will utilize diesel engine(s) that are self-propelled (e.g., a diesel engine internal to a rock crusher or screen that is on tracks) and meets the definition of a **nonroad engine**[[5]](#footnote-5) under 40 C.F.R. 1068.30 Nonroad Engine-(1)(i).

 This asphalt plant facility will utilize highline power and will not have a diesel generator.

1. **Location Criteria.**

Please answer the question below. If you answered “**No**” then you do not qualify for an MG3 permit. Please contact ADEC.

|  |  |  |
| --- | --- | --- |
| **Yes** | **No** | **Criteria** |
|  |  | 1. Will the stationary source follow the location considerations specified in Section 2? |

# Section 2: Location Considerations

When applying to operate an asphalt plant, the applicant should consider the permit conditions relating to selecting an operating site for the asphalt plant facility.

Permit Condition 1 states that the Permittee should give adequate consideration to siting issues when operating or changing the location of an asphalt plant. Specifically, do not operate the asphalt plant or diesel engine within **330 ft** of the nearest occupied structure off the work site.

In addition, do not operate for more than two construction seasons at the same site located within **800 ft** of the nearest residence or occupied structure or within **1,100 ft** of the nearest residence or occupied structure if the plant is located on terrain that is more than 50 ft above any ground level of the aggregate drier or drum mixer.

These setback distances were designed to protect the State ambient air quality standards and increments listed in 18 AAC 50.010 and 18 AAC 50.020.

The stationary source must comply with these terms when operating the asphalt plant facility under this general permit.

# Section 3: Stationary Source Identification Information

|  |  |
| --- | --- |
| Stationary Source Name | Click here to enter text. |
| Physical Address[[6]](#footnote-6) | Click here to enter text. |
| City, State, Zip Code | Click here to enter text. |
| Latitude/Longitude, or UTM Coordinates | Click here to enter text. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stationary Source Contact Information** | | | | |
| **\*Permittee** - The entity applying for the permit. This can be either the owner or the operator. | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address | | Click here to enter text. |
| **\*Responsible Official**[[7]](#footnote-7) **-** The name of the individual responsible for the plant’s day- to-day operations. | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address | | Click here to enter text. |
| **\*Billing Contact** | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address | | Click here to enter text. |
| **Legal Owner** - The stationary source’s legal owner. The legal owner could be either a person or a company. | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address | | Click here to enter text. |
| **Point of Contact** – If different from Responsible Official. | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address | | Click here to enter text. |
| **Stationary Source’s Consultant** - If applicable, the name of the business or entity that prepared the application and/or prepares reports. | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address | | Click here to enter text. |
| **Designated Agent** - The regulations allow Permittees to designate an individual responsible for permit matters. The designated agent could be a person, a separate company, or a law firm. | | | | |
| Name | Click here to enter text. | Title | | Click here to enter text. |
| Mailing Address | Click here to enter text. | Phone Number | | Click here to enter text. |
| City, State, Zip | Click here to enter text. | Email Address (optional) | | Click here to enter text. |
| **Individuals from your organization authorized to incur fees** (please include consultants, if applicable) | | | | |
| Name | Click here to enter text. | Name | Click here to enter text. | |
| Name | Click here to enter text. | Name | Click here to enter text. | |

\*Required fields.

# Section 4: Stationary Source Information

In the tables below, fill out the operation information for the asphalt plant, pollution control equipment, and diesel engines that will operate with this stationary source.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Asphalt Plant – *check boxes that apply and complete all fields.* | | | | | | | | | | | | | |
| Does your plant have a dryer batch processing unit or drum continuous processing unit? | | | | | | | | | | | | | |
| Dryer  Drum | *For the purpose of this application, asphalt plants with a dryer proportion the mix in batches by either weight or volume. Components of this type of a stationary source usually consist of a dryer, burner, screens, and a pug mill. Asphalt plants with a drum proportion the mix by a continuous volumetric proportion system and mix the asphalt oil and aggregate in the drum.* | | | | | | | | | | | | |
| Make: Click here to enter text. | | | | | | | | Model: Click here to enter text. | | | | | |
| Serial No.: Click here to enter text. | | | | | | | | Year of Manufacture: Click here to enter text. | | | | | |
| Is your facility portable?  Yes  No | | | | Fuel Type:  Used oil fuel blends  Heavy fuel oils  Natural Gas  #1 or #2 fuel oil  Highline Power  Other: \_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_ | | | | | | | | | |
| Maximum rated capacity[[8]](#footnote-8): | | | | | | TPH | | Primary Burner Size: | | | | | Btu/hr |
| Maximum Fuel Feed: | | | | gallon/hr | | | | Chamber Size: | | | | | cubic ft |
|  | | | | | | | | | | | | | |
| Pollution Control Equipment – *check boxes that apply and complete the required information*. | | | | | | | | | | | | | |
| **\*Primary PM control device:** Click here to enter text. | | | | | | | | | | | | | |
| Cyclone | | Knockout Box (settling chamber) | | | | | | | | Other (specify): | | | |
| Particle size removed: Click here to enter text. | | | | | | | | | | | | | |
| **\*Secondary PM control device:** | | | | | | | Baghouse | | Scrubber | | | | |
| \*Make:Click here to enter text. | | | | | | | | \*Model: Click here to enter text. | | | | | |
| \*Serial No.: Click here to enter text. | | | | | | | | \*Year of Manufacture: Click here to enter text. | | | | | |
| \*Capture Efficiency: | | | % | | | | | \*Control Efficiency: | | | % | | |
| Efficiency determined by:Click here to enter text. | | | | | | | | | | | | | |
| \*Exhaust stack height: | | | | | feet | | | \*Stack Diameter: | | | | inches | |
| Exit gas temperature: | | | | | °F | | | Exit gas velocity: | | | |  | |
| Actual exit gas flow rate: | | | | |  | | | Data source[[9]](#footnote-9): | | | |  | |
| \*Required | | | | | | | | | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Diesel Engines – *complete required fields for each diesel engine.* | | | | | |
| ***Engine 1*** | Is this engine stationary or nonroad?  Stationary  Nonroad[[10]](#footnote-10) | | | | |
| Make: Click here to enter text. | | | Model: Click here to enter text. | | |
| Serial #: Click here to enter text. | | | Manufacture Date: Click here to enter text. | | |
| Portable?  Yes  No | | | Design Capacity: | hp, kW, MW | |
| Exhaust Stack Diameter: | | inches | Maximum fuel rate: | | gal/hr |
| ***Engine 2*** | Is this engine stationary or nonroad?  Stationary  Nonroad10 | | | | |
| Make: Click here to enter text. | | | Model: Click here to enter text. | | |
| Serial #: Click here to enter text. | | | Manufacture Date: Click here to enter text. | | |
| Portable?  Yes  No | | | Design Capacity: | hp, kW, MW | |
| Exhaust Stack Diameter: | | inches | Maximum fuel rate: | | gal/hr |
| ***Engine 3*** | Is this engine stationary or nonroad?  Stationary  Nonroad10 | | | | |
| Make: Click here to enter text. | | | Model: Click here to enter text. | | |
| Serial #: Click here to enter text. | | | Manufacture Date: Click here to enter text. | | |
| Portable?  Yes  No | | | Design Capacity: | hp, kW, MW | |
| Exhaust Stack Diameter: | | inches | Maximum fuel rate: | | gal/hr |

*Other Equipment Summary*

|  |  |
| --- | --- |
| **Equipment Type** | **Number of Units** |
| Conveyors |  |
| Screens |  |
| Asphalt cement heaters (fuel-fired) |  |
| Asphalt oil heaters (fuel-fired) |  |
| Silo heaters (fuel-fired) |  |

**SIC/NAICS Codes: check all that apply**

1442 (SIC)/212321 (NAICS) Construction Sand & Gravel

1446 (SIC)/212322 (NAICS) Industrial Sand

1611 (SIC)/237310 (NAICS) Highway & Street Construction

1629 (SIC)/236210 (NAICS) Heavy construction

1771 (SIC)/238110 (NAICS) Driveways & parking lots (concrete work)

2951 (SIC)/324121 (NAICS) Asphalt Paving Mixtures and Blocks

Other (provide code & describe activity): Click here to enter text.

# Section 5: Particulate Matter Source Test Requirements

Please attach copies of the most recent particulate matter source test results for this hot mix asphalt plant or attach a manufacturer’s certification that the hot mix asphalt plant will meet the following grain loading standards:

* 0.04 gr/dscf for asphalt plants constructed or modified *after* **June 1973**; or
* 0.05 gr/dscf for asphalt plants constructed or modified *on or* *before* **June 1973**.

For asphalt facilities that are used but new to the State of Alaska, attach results of a source test that shows the hot mix asphalt plant meets the grain loading standards listed above.

If a PM source test has not been approved by the Department at your facility within the last five years, the minor general permit will require you to conduct a PM source test within the first 30 operating days after receiving your letter of authorization.

# Section 6: Stationary Diesel Engine Generator Certification

Please attach documents that certify that the stationary diesel engine generator will meet the grain loading standard for fuel burning equipment of 0.05 grains per dry standard cubic feet (gr/dscf).

There is some question whether engines less than 200 hp meet the particulate matter standard of 0.05 gr/dscf. For engines of this size please include information that engine meets one of the EPA Nonroad Tier Certifications or provide vendor particulate emission estimates including exhaust flow estimates, source test of an identical unit or a schedule when a source test will be performed on that unit.

You do not need to attach a certification if the generator engine is a nonroad engine.[[11]](#footnote-11)

# Section 7: Process Flow Diagram

Please attach a process flow diagram to this application. Stationary source process diagrams show the typical stationary source process and identify each emission point, which emission points will be monitored, and control device(s). (See examples of process flow diagrams from US Environmental Protection Agency AP 42, Fifth Edition, Volume I, Chapter 11: Mineral Products Industry, 11.1 Hot Mix Asphalt Plants, April 2004).

# Section 8: Operation and Maintenance Plan

The Department strongly encourages the Owner or Operator to develop and implement an Operation and Maintenance (O&M) Plan as the means to comply with Good Air Pollution Control Practice requirements under 18 AAC 50.030 listed in the MG3.

The O&M Plan should be updated on a periodic basis and whenever the stationary source has a change in operations. The plan should include checklists for the daily, weekly, monthly, and seasonal checks and records. The plan should consider and discuss the following:

**Dryer and burner**

1. Inspection of excess air and damper settings.
2. Inspection for cracks or holes in the dryer shell and inspection of dryer components.
3. Maintenance of the burner and associated components

**Dry Cyclone (if applicable)**

1. Inspection/adjustment of vortex shield in order to maximize the cyclone efficiency.
2. Monthly inspection of cyclone’s physical integrity and dust collection system.

**Fabric Filter (Baghouse**)

*Record manufacturer's specified temperatures, pressure, and flow rate. Monitoring of Operation:*

Record daily and compare with manufacturer’s specifications or opacity regulation:

1. Pressure at baghouse inlet/outlet inches water column
2. Temperature at baghouse inlet
3. Dust level in hopper
4. Discharge pressure at air compressor for bag cleaning in psig
5. Screw conveyor motor amps meter
6. Visible emissions

Preventative Maintenance:

*Weekly Maintenance Recommendations*

1. Check for and remove dust from the clean side of the tubesheet area and check for corrosion. If more than a dust film is found, then locate and repair the leak
2. Check inlet and outlet damper seals, repair if needed
3. Thoroughly inspect bags, replace damaged bags, clamps, or cages, immediately
4. Check all damper valves for proper operation, repair seal as necessary
5. Check bag shaker assembly or compressed air lines including, filters, and dryers, replace parts as necessary
6. Check operation and sequence of all compressed air valves

*Monthly Maintenance*

1. Clean, Repair/replace bags per manufacturer’s recommendation. Log work
2. Inspect inside of housing for corrosion
3. Inspect door seals, repair as necessary

**Wet scrubber (venturi scrubber)**

*Record manufacturer’s specified pressure drop and flow rate.*

Record daily and compare with manufacturer’s specifications or opacity regulation:

1. Gas pressure at scrubber venturi inlet/outlet
2. Scrubbing water inlet and outlet temperature, °F and pressure, psig
3. Water Pump motor current draw, amps or water flow rate
4. Visible emissions from stack. Excessive droplet carryover indicates poor mist eliminator performance

*Preventative Maintenance*

*Weekly*

1. Check pump for leaking gland. Replace defective mechanical seal or packing
2. Inspect piping valves and fittings for leaks or signs of corrosion
3. Check the scrubber for holes and leaks, repair as necessary.
4. If the scrubbing water appears muddy, check settling/cooling pond.

*Monthly*

1. Inspect the mist eliminator, including internals, for proper operation, plugging and corrosion.
2. Clean out and/or repair.

*Once per season*

1. Completely flush the scrubber piping and clean out instrument connections, check accuracy of instruments (pressure gauges, thermocouples etc.)
2. Thoroughly inspect the scrubber body, venturi plate, and lining.

**Ductwork and induced draft fan**

*Preventative Maintenance*

*Weekly*

1. Make quick visual inspections for holes or leaks
2. Operate dampers several times to insure proper operation
3. Inspect fan bearings for proper oil level and temperature, excess vibration
4. Check fan belts for proper tension, wear
5. Thoroughly inspect stack for holes, crack, leaks, and repair as necessary

*Monthly*

1. Inspect ductwork for leaks
2. Inspect the fan bearing housing for leaks and cracks, repair as necessary
3. Open the fan housing and inspect the wheel for abrasion, corrosion, and material buildup

*Once per season*

1. Thoroughly inspect damper blades for wear, replace if necessary
2. Inspect automatic damper drives, bearings, repair or replace as necessary
3. Thoroughly inspect all ductwork joints and seals for tightness

# Section 9: Fugitive Dust Control Plan

Attach a fugitive dust control plan that addresses each fugitive dust source and how the facility owner or operator plans to take reasonable precautions to prevent fugitive dust.

The Fugitive Dust Control Plan (Plan) has the purpose to control the fugitive dust emissions from asphalt plant and crusher related activities. The Plan is required for all Minor General Permit holders in order to ensure that reasonable precautions to prevent fugitive dust are taken.

A sample plan can be found in *Attachment 5: Sample Fugitive Dust Control Plan*. This plan may be filled out and used for any Minor General Permitted source. You are not required to use the sample form, but similar information contained in the sample form should be included in your plan. If you already have a plan developed or you wish to develop your own plan, the following items should be addressed:

* Points capable of producing fugitive emissions;
* Control of fugitive dust sources, such as:
  + Water application;
  + Dust suppressants;
  + Wind barriers;
  + Hoods, covers, or enclosures;
  + Cleanup of loose materials;
  + Minimizing drop distances and lowering loader buckets before dumping;
  + Fans;
  + PM control devices;
* Methods to prevent vehicle trackout or carryout, such as:
  + Grizzlies or grates;
  + Gravel pads;
  + Paved surfaces;
  + Wheel washers;
  + Truck washing.

# Section 10: Potential to Emit

Provide the Asphalt Plant and Diesel Engine PTE for PM in tons per year (TPY) in Table A. If your diesel engine(s) qualify as nonroad engine(s)[[12]](#footnote-12), do not count their PTE in “Total PTE.”

See *Attachment 2: Determining Potential to Emit (PTE)* for instructions on how to determine PTE for your facility, or calculate using the *MG3 Potential to Emit Spreadsheet* on the Department’s general permit website.[[13]](#footnote-13) If the PTE tables in *Attachment 2: Determining Potential to Emit (PTE)* or the *MG3 Potential to Emit Spreadsheet* on the Department’s general permit website14 are not used for completing Table A, please include your PTE calculations with this application.

**Table A: PTE in Tons Per Year**

|  |  |  |  |
| --- | --- | --- | --- |
| Pollutant | Asphalt Plant | Diesel Generator(s) | Total PTE |
| NOX |  |  |  |
| CO |  |  |  |
| SO2 |  |  |  |
| PM-10 |  |  |  |
| VOC |  |  |  |

# Section 11: Emission Fees

Applicants must include an estimate for the emissions from the stationary source with their application. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit, for each period from July 1 through the following June 30. The quantity for which fees will be assessed is the lesser of the stationary source’s assessable PTE measured in TPY from Section 10: Potential to Emit; or the stationary source’s projected annual rate of emissions in TPY, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department. The use of larger potential emissions will result in larger fees as they are based on 3,650 hours of operation per year.

Complete and submit the form in *Attachment 4: Emission Fee Estimate* to the Department to report your emission estimates for the current state fiscal year.

Use *Attachment 3: Calculating Assessable Emissions* as a guide and worksheet for completing the emissions fee estimate, or the *MG3 Assessable Emissions Estimate* spreadsheet on the Department’s general permit website.14 The emissions estimate may be made based on the previous year's operations or the expected operations for the coming year. Emission fees are billed in advance by the Department before July 1st of the current year.

In order to estimate emission fees, you must have the following information available:

1. Tons of asphalt produced in the previous year, or hours of asphalt production, or expected tons of asphalt to be processed.
2. Hours, or expected hours, of operation of the diesel engine(s).

The actual hours of operation (if not known) may be estimated by dividing the tons of asphalt produced by the rated capacity of the asphalt plant. If the asphalt plant is operated at less than the maximum rate of production, use that rate in place of the rated capacity.

Once assessable emissions have been calculated, use *Attachment 4: Emission Fee Estimate* to total the estimated emissions from the Asphalt Plant and the stationary diesel generator(s)[[14]](#footnote-14) for each pollutant. Enter the total amount of emissions for each criteria pollutant in the Assessable Emissions column.

The current emission fee rate can be found in 18 AAC 50.410 and on the Department’s general permit webpage[[15]](#footnote-15) under the fee section for MG3 and MG9 permits.

# Section 13: Certification

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Signature of Responsible Official*

\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Printed Name*

\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Title*

# Attachment 1: Definitions

***Assessable Emission*** *means:*

*[18 AAC 50.990(13)]*

“Assessable emission” has the meaning given in AS 46.14.250(h)(1);

*[AS 46.14.250(h)(1)]*

“Assessable emission” means the quantity of each air pollutant for which emission fees are assessed and is the lesser of

1. The stationary source’s potential to emit, in tons per year, each air pollutant; or
2. The projected annual rate of emissions, in tons per year, of each air pollutant by the stationary source based upon previous actual annual emissions if the permittee can demonstrate to the department its previous actual annual rate of emissions through monitoring, modeling, calculations, or other method acceptable to the department.

***Potential to Emit (PTE)*** *means:*

*[18 AAC 50.990(80)]*

“Potential to emit” has the meaning given in AS 46.14.990;

*[AS 46.14.990(22)]*

“Potential to emit” has the meaning given in 40 C.F.R. 51.166(b);

*[40 C.F.R. 51.166(b)(4)]*

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

***Responsible official*** *means:*

*[18 AAC 50.990(93)]*

1. For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or a duly authorized representative of that person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under AS 46.14 or this chapter, and
   1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million in second quarter 1980 dollars; or
   2. The delegation of authority to the representative is approved in advance by the department;
2. For a partnership or sole proprietorship, a general partner or the proprietor, respectively; and
3. For a public agency, a principal executive officer or ranking elected official; for the purposes of this chapter, a principal executive officer of a federal agency includes the chief executive officer with responsibility for the overall operations of a principal geographic unit in this state;

***Nonroad engine*** means:

“Nonroad engine” has the meaning given in 40 CFR 1068.30. As of the issuance date of this permit, the Department is in the process of adopting this definition into 18 AAC 50.990(63).

*[40 CFR 1068.30]*

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under [40 CFR part 60](https://www.ecfr.gov/current/title-40/part-60), (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act ([42 U.S.C. 7411](https://www.govinfo.gov/link/uscode/42/7411))). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under [40 CFR part 60](https://www.ecfr.gov/current/title-40/part-60).

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See [§ 1068.31](https://www.ecfr.gov/current/title-40/section-1068.31) for provisions that apply if the engine is removed from the location.

# Attachment 2: Determining Potential to Emit (PTE)

Use the following tables to determine PTE for your facility, or calculate PTE using approved emission factors (EFs) and equations to complete Table A in Section 10: Potential to Emit of this application. Alternatively, you may attach the *MG3 Potential to Emit* spreadsheet from the Department’s general permit webpage[[16]](#footnote-16) to this application. The tables below provide approved EFs and emissions equation based on EPA AP-42, 5th edition.

How to use the Emissions Calculation Tables:

Asphalt Plant

1. You will need the following information to proceed:
   1. Type of hot mix asphalt plant (batch mix or continuous drum);
   2. The rated capacity (RC) of your asphalt plant in tons per hour (TPH); and
   3. Type of control equipment (baghouse or scrubber).
2. Round the RC value of your asphalt plant to the nearest value listed in the tables.
3. Based on RC, find the emissions calculation in each table that applies to your operation and record in the table at the end of this attachment.
4. Record the potential emissions in Section 10, Table A, Asphalt Plant column.

Diesel Engines

1. You will need the following information to proceed:
   1. Rated capacity in horsepower (hp) of each diesel engine; and
   2. If your engines are classified as stationary or nonroad.
2. Determine the PTE of each diesel engine separately.
3. Round each RC to the nearest value found in the tables (increments of 25 or 50 hp).
4. Use the table that fits the engine you are calculating PTE for. One table is for engines with RC of more than 600 hp, the other is for smaller engines.
5. Record the emissions value in the table at the end of this attachment for each pollutant for each engine based on RC value.
6. Add up the potential emissions for all engines and record in Section 10, Table A, Diesel Engines column.

Total PTE

1. For Total PTE, add all PTE values for each pollutant from the asphalt plant based on the type of asphalt plant and control type associated with the asphalt plant to the pollutant values from the stationary diesel engine(s). Nonroad engines[[17]](#footnote-17) **should no**t have their PTE included in this total.
2. Record the Total PTE in Section 10, Table A.

**NOTE:** You can calculate PTE without using the tables in this attachment or the *MG3 Potential to Emit* spreadsheet on the Department’s general permit website.17 If you do your own calculations, please attach a copy to this application for Department review. You can use the general calculation instructions in *Attachment 3:* Calculating Assessable Emissions, using 3,650 operating hours, as a reference for completing your own calculations.

# *MG3 Attachment 2: Potential To Emit (PTE) Calculation Tables*

Constants:

|  |  |
| --- | --- |
| TPY …… | tons per year |
| TPH …… | tons per hour |
| EF …… | emission factor (AP-42) |
| RC …… | rated capacity (crushing |
| lbs …… | pounds |
| E …… | emissions |
| ULSD …… | Ultra-low sulfur diesel |
| NoC …… | number of conveyers |

1.) 2,000 (lbs/ton) Abbreviations:

Assumptions:

1.) 3,650 hours of operation per year

2.) E = (EF x (Hours of operation per year x RC)) / lbs per ton

Applicability (3,650 hours PTE):

Note: Double underline indicates a GP3 or MSS permit may be needed.

Batch Mix Asphalt Plant #2 Diesel

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RC(TPH) | | | | | | | | | | | | | | | | | | | |
| EF(lbs/ton) | 100 | 125 | 135 | 140 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 325 | 350 | 375 | 400 | 420 | 425 | 450 | 475 | 500 |
| 0.4 **CO**  0.12 **NOx**  0.088 **SO2**  0.0082 **VOC** | 73.0 | 91.3 | 98.6 | 102.2 | 109.5 | 127.8 | 146.0 | 164.3 | 182.5 | 200.8 | 219.0 | 237.3 | 255.5 | 273.8 | 292.0 | 306.6 | 310.3 | 328.5 | 346.8 | 365.0 |
| 21.9 | 27.4 | 29.6 | 30.7 | 32.9 | 38.3 | 43.8 | 49.3 | 54.8 | 60.2 | 65.7 | 71.2 | 76.7 | 82.1 | 87.6 | 92.0 | 93.1 | 98.6 | 104.0 | 109.5 |
| 16.1 | 20.1 | 21.7 | 22.5 | 24.1 | 28.1 | 32.1 | 36.1 | 40.2 | 44.2 | 48.2 | 52.2 | 56.2 | 60.2 | 64.2 | 67.5 | 68.3 | 72.3 | 76.3 | 80.3 |
| 1.5 | 1.9 | 2.0 | 2.1 | 2.2 | 2.6 | 3.0 | 3.4 | 3.7 | 4.1 | 4.5 | 4.9 | 5.2 | 5.6 | 6.0 | 6.3 | 6.4 | 6.7 | 7.1 | 7.5 |
| *PM-10 with Baghouse* | |  |  | | | | | | | | | | | | | | | | | |
| 0.027 **PM-10** | 4.9 | 6.2 | 6.7 | 6.9 | 7.4 | 8.6 | 9.9 | 11.1 | 12.3 | 13.6 | 14.8 | 16.0 | 17.2 | 18.5 | 19.7 | 20.7 | 20.9 | 22.2 | 23.4 | 24.6 |
| *PM-10 with Wet Scrubber* | |  |  | | | | | | | | | | | | | | | | | |
| 0.14 **PM-10** | 25.6 | 31.9 | 34.5 | 35.8 | 38.3 | 44.7 | 51.1 | 57.5 | 63.9 | 70.3 | 76.7 | 83.0 | 89.4 | 95.8 | 102.2 | 107.3 | 108.6 | 115.0 | 121.4 | 127.8 |

\*For all rated capacities, round up to the nearest tabled value.

(Continuous) Drum Mix Asphalt Plant #2 Diesel

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RC(TPH) | | | | | | | | | | | | | | | | | | | |
| EF(lbs/ton) | 100 | 125 | 135 | 140 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 325 | 350 | 375 | 400 | 420 | 425 | 450 | 475 | 500 |
| 0.13 **CO**  0.055 **NOx**  0.011 **SO2**  0.032 **VOC** | 23.7 | 29.7 | 32.0 | 33.2 | 35.6 | 41.5 | 47.5 | 53.4 | 59.3 | 65.2 | 71.2 | 77.1 | 83.0 | 89.0 | 94.9 | 99.6 | 100.8 | 106.8 | 112.7 | 118.6 |
| 10.0 | 12.5 | 13.6 | 14.1 | 15.1 | 17.6 | 20.1 | 22.6 | 25.1 | 27.6 | 30.1 | 32.6 | 35.1 | 37.6 | 40.2 | 42.2 | 42.7 | 45.2 | 47.7 | 50.2 |
| 2.0 | 2.5 | 2.7 | 2.8 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 | 6.0 | 6.5 | 7.0 | 7.5 | 8.0 | 8.4 | 8.5 | 9.0 | 9.5 | 10.0 |
| 5.8 | 7.3 | 7.9 | 8.2 | 8.8 | 10.2 | 11.7 | 13.1 | 14.6 | 16.1 | 17.5 | 19.0 | 20.4 | 21.9 | 23.4 | 24.5 | 24.8 | 26.3 | 27.7 | 29.2 |
| *PM-10 with Baghouse* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |
| 0.023 **PM-10** | 4.2 | 5.2 | 5.7 | 5.9 | 6.3 | 7.3 | 8.4 | 9.4 | 10.5 | 11.5 | 12.6 | 13.6 | 14.7 | 15.7 | 16.8 | 17.6 | 17.8 | 18.9 | 19.9 | 21.0 |
| *PM-10 with Wet Scrubber* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |
| 0.04 **PM-10** | 7.3 | 9.1 | 9.9 | 10.2 | 11.0 | 12.8 | 14.6 | 16.4 | 18.3 | 20.1 | 21.9 | 23.7 | 25.6 | 27.4 | 29.2 | 30.7 | 31.0 | 32.9 | 34.7 | 36.5 |

\*For all rated capacities, round up to the nearest tabled value.

ULSD Stationary IC Engine > 600hp, Uncontrolled

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RC(hp) | | | | | | | | | | | | | | | | | | |
| EF(lbs/hp-hr) | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 |
| 0.0055 **CO**  0.024 **NOx**  0.0007 **PM-10**  0.000705 **VOC** | 6.0 | 6.5 | 7.0 | 7.5 | 8.0 | 8.5 | 9.0 | 9.5 | 10.0 | 10.5 | 11.0 | 10.5 | 11.0 | 11.5 | 12.0 | 12.5 | 13.0 | 13.6 | 14.1 |
| 26.3 | 28.5 | 30.7 | 32.9 | 35.0 | 37.2 | 39.4 | 41.6 | 43.8 | 46.0 | 48.2 | 46.0 | 48.2 | 50.4 | 52.6 | 54.8 | 56.9 | 59.1 | 61.3 |
| 0.8 | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 | 1.3 | 1.4 | 1.3 | 1.4 | 1.5 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 |
| 0.8 | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 |
| *SO2 with ULSD .0015% sulfur content limit by weight* | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.2135E-05 **SO2** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

\*For all rated capacities, round up to the nearest tabled value.

ULSD Stationary IC Engine ≤ 600hp

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RC(hp) | | | | | | | | | | | | | | | | | | |
| EF(lbs/hp-hr) | 50 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 325 | 350 | 375 | 400 | 425 | 450 | 475 | 500 | 550 |
| 0.00668 **CO**  0.031 **NOx**  0.0022 **PM-10**  0.0000247 **VOC** | 0.6 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1 | 6.7 |
| 2.8 | 5.7 | 7.1 | 8.5 | 9.9 | 11.3 | 12.7 | 14.1 | 15.6 | 17.0 | 18.4 | 19.8 | 21.2 | 22.6 | 24.0 | 25.5 | 26.9 | 28.3 | 31.1 |
| 0.2 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| *SO2 with ULSD .0015% sulfur content limit by weight* | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.2135E-05 **SO2** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*\*For all rated capacities, round up to the nearest tabled value.*

If your engine does not fit into either of these tables, or does not use ULSD, please consult the Department for assistance with your application.

Use tabled values for each IC engine, not total generating capacity. Do not include PTE from engines that meet the definition of nonroad engine.[[18]](#footnote-18)

PTE for the MG3 assumes 3,650 hours per year of operation. For emission fees and assessable emissions estimates, see Section 11: Emission Fees and *Attachment 3: Calculating Assessable Emissions*.

**PTE: Asphalt Plant Emissions Totals (TPY)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Pollutant** | **Asphalt Plant** | **IC Engines (Stationary)** | | | **Total** |
| **CO** |  |  |  |  |  |
| **NOx** |  |  |  |  |  |
| **SO2** |  |  |  |  |  |
| **PM-10** |  |  |  |  |  |
| **VOC** |  |  |  |  |  |

If potential emissions for any one (1) pollutant are greater than 100 TPY, a GP3 or MSS permit is needed.

# Attachment 3*:* Calculating Assessable Emissions

Assessable Emissions differ from a source's PTE. PTE is used in calculating a source's permit applicability and classification, i.e. minor or major source. While PTE does not include fugitive particulate emissions, assessable emissions do. A source can be classified as a minor source yet have emission fees based on a criteria pollutant in excess of 100 tons. Likewise, a major source can have a PTE in excess of 100 TPY of a criteria pollutant yet pay emission fees for that pollutant at a rate far lower. Assessable Emissions use the same calculations as PTE, only operating hours are not based on a maximum potential of 3,650 hours (assumed), but instead are based on actual operation for a calendar year. For examples and steps on completing this form to assist in submission of Assessable Emissions, please see the information below.

Equation:

E = (EF x (tons of asphalt produced or hours of operation in a given year x RC)) / 2000 lbs per ton

|  |  |
| --- | --- |
| Abbreviations: | |
| TPY | Tons Per Year |
| TPH | Tons Per Hour |
| EF | emission factor (AP-42) |
| RC | rated capacity (hp for diesel engines) |
| lbs | pounds |
| E | emissions |
| ULSD | Ultra-low sulfur diesel |
| NoC | number of conveyers |

Report using *Attachment 4: Emission Fee Estimate* and submit with this application. Each emission unit (asphalt plants and stationary diesel engines) listed in Section 4: Stationary Source Information will need a separate calculation using equations provided, where rated capacity is the horsepower for stationary diesel engines and tons per hour for the asphalt plant.

Emission factors are pollutant/emission unit specific. Fuel assumes use of ultra-low sulfur diesel (ULSD); please contact the Department for assistance if you use alternative fuels. Please see the worksheet on the next page for emission factors and further assistance.

# *MG3 Assessable Emissions Calculations Worksheet*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Asphalt Plants** | **CO** | **NOX** | **SO2** | **VOC** | **PM-101** | **PM-102** |
| Batch Mix Asphalt Plant | 0.4 | 0.12 | 0.088 | 0.0082 | 0.027 | 0.14 |
| Drum Mix Asphalt Plant | 0.13 | 0.055 | 0.011 | 0.032 | 0.023 | 0.04 |
| Asphalt plant emission factors are given in lbs of pollutant per ton of asphalt produced. | | | | | | |
| **1**: PM-10 EF for use with a baghouse  **2**: PM-10 EF for use with a wet-scrubber | | | | | | |
| **Stationary Diesel Engines**[[19]](#footnote-19) | **CO** | **NOX** | **SO23** | **VOC** | **PM-10** |  |
| Greater than 600hp | 0.0055 | 0.024 | 1.2x10-5 | 0.000705 | 0.0007 |  |
| Up to 600hp | 0.00668 | 0.031 | 1.2x10-5 | .0000247 | 0.0022 |  |
| Diesel engine emission factors are given in lbs of pollutant per horsepower-hour. | | | | | | |

**3**: SO2 EF for use with ULSD

Asphalt Plant Worksheet: E = (EF x tons of asphalt produced) / 2,000 lbs per ton

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CO | NOX | SO2 | VOC | PM-10 |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

Stationary Diesel Engine16 Worksheet: E = (EF x hours of operation x RC) / 2,000 lbs per ton

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CO | NOX | SO2 | VOC | PM-10 |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

Total Emissions: add all rows above for listed emission units.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CO | NOX | SO2 | VOC | PM-10 |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
|  | | | | |
| **Assessable Emissions**: Enter these values below and on *Attachment 4: Emission Fee Estimate*and submit with this application. | | | | |
| CO | NOX | SO2 | VOC | PM-10 |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

# Attachment 4*:* Emission Fee Estimate

Submit the following information to the Department at the same time you submit your application.

Submit emissions online through Air Online System (AOS) at the following website: <https://dec.alaska.gov/Applications/Air/airtoolsweb/>

Or

Email to: [DEC.AQ.Airreports@alaska.gov](mailto:DEC.AQ.Airreports@alaska.gov)

*(If emailed, the report must be signed and certified in accordance with 18 AAC 50.345(j).)*

Or

Mail to:

ADEC Air Compliance Program

610 University Avenue

Fairbanks, AK 99709-3643

Or

FAX to (907) 451-2187

Stationary Source Name: \_\_ Click here to enter text. \_

Permit Number: \_ Click here to enter text. \_\_ Date: \_\_ Click here to enter text. \_\_\_

Emission Fee Estimate for: \_\_ Click here to enter text. \_\_ (State fiscal year)

**Table 1. Assessable Emission Fee Estimate**

|  |  |  |  |
| --- | --- | --- | --- |
| **Pollutant** | **Asphalt Plant** | **Stationary Diesel Generator(s)** | **Assessable Emissions** |
| NOx | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| CO | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| SO2 | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| PM-10 | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| VOC | Click here to enter text. | Click here to enter text. | Click here to enter text. |

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_Click here to enter text.\_\_Click here to enter text.\_\_\_\_\_\_\_

*Signature Printed Name Title*

# Attachment 5: Sample Fugitive Dust Control Plan

Please note it is the responsibility of the Permittee to ensure that no part of their fugitive dust control plan violates any local, state, or federal law.

|  |  |  |
| --- | --- | --- |
| **Section 1 – General Information** | | |
| **1-A Facility Information** | | |
| Company Name: | Click here to enter text. | |
| Plant Name: | Click here to enter text. | |
| Permit No.: | Click here to enter text. | |
| **1-B Contacts** | | |
| Report the names, address, and phone numbers of persons and owners or operators responsible for the implementation of the Dust Control Plan and responsible for the dust generating operation and dust control applications. | | |
| *Responsible Official* (authorized under 18 AAC 50.990(93)) | | |
| Name: | Click here to enter text. | |
| Phone Number: | Click here to enter text. | |
| *On-site Manager/Operator or Point of Contact* (if different from above) | | |
| Name: | Click here to enter text. | |
| Phone Number: | Click here to enter text. | |
| **1-C Recordkeeping and Reporting** | | |
| Keep a copy of Fugitive Dust Control Plan on-site at all times.  Keep records of deviations from dust plan, reasons for the deviation, and corrective actions taken for at least five years. | | |
| **Section 2 – Fugitive Emission Points** | | |
| **2-A Fugitive Emission Points** | |
| Identify the relative locations of actual and potential sources of fugitive dust emissions.  Bulk material handling and storage areas.  Paved and unpaved access roads, haul roads, traffic areas, and equipment storage yards.  Exit points where carryout and vehicle trackout onto paved public roads may occur.  Water supply locations if water application will be used for controlling visible dust emissions.  Rock crushing operations.  Screening  Conveyors  Fines Screening  Asphalt plant operations  Screening  Conveyors  Baghouse Catch  Drum Mixer Discharge  Hot mix storage silo receiving point | |
| **2-B Comments – Fugitive Emission Points** | |
| Click here to enter text. | |

|  |
| --- |
| **Section 3 – Control of Fugitive Dust Sources** |
| **3-A Control of Fugitive Dust Sources**  Check any boxes that apply. Checked boxes represent methods that will be used ***as needed***. |
| *Active Operations*  Water will be applied to dry areas during leveling, grading, trenching, and earthmoving activities.  Wind barriers will be constructed and maintained, and water or dust suppressants will be applied to the disturbed surface areas. |
| *Inactive Operations,* including after work hours, weekends, and holidays  Not applicable for this project (Please explain why in Section 3-C).  Water or dust suppressants will be applied on disturbed surface areas to form a visible crust, and vehicle access will be restricted to maintain the visible crust. |
| *Sites Inactive for Seven or More Days*  Not applicable for this project (Please explain why in Section 3-C).  Vehicle access will be restricted and water/dust suppressants will be applied at all un-vegetated areas.  Vegetation will be established on all previously disturbed areas.  Gravel will be applied and maintained at all previously disturbed areas.  Previously disturbed areas will be paved. |
| *Unpaved Access and Haul Roads, Traffic and Equipment Storage Areas*  Not applicable for this project (Please explain why in Section 3-C).  Apply water or dust suppressants to unpaved haul and access roads.  Post speed limit signs of not more than 15 mph at each entrance, and again every 500 ft.  Water or dust suppressants will be applied to vehicle traffic and equipment storage areas. |
| *Wind Events*  Water application equipment will apply water to control fugitive dust during wind events, unless unsafe to do so. Outdoor construction activities that disturb the soil will cease whenever visible dust emissions cannot be effectively controlled. |
| **3-B Bulk Materials** |
| Check any boxes that apply. Checked boxes represent methods that will be used ***as needed***. |
| *Outdoor Handling of Bulk Materials*  Water or dust suppressants will be applied when handling bulk materials.  Wind barriers with less than 50 percent porosity will be installed and maintained, and water or dust suppressants will be applied. |
| *Outdoor Storage of Bulk Materials*  Water or dust suppressants will be applied to storage piles.  Storage piles will be covered with tarps, plastic, or other suitable material and anchored in such a manner that prevents the cover from being removed by wind actions.  Wind barriers with less than 50 percent porosity will be installed and maintained around the storage piles and water or dust suppressants will be applied.  A three-sided structure (< 50% porosity) will be used that is at least as high as the storage piles. |
| *On-Site Transporting of Bulk Materials*  Vehicle speed will be limited on the work site.  All haul trucks will be loaded such that the freeboard is not less than six inches when transported across any paved public access road.  A sufficient amount of water will be applied to the top of the load to limit visible dust emissions.  Haul trucks will be covered with a tarp or other suitable cover. |

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| **Section 3 – Control of Fugitive Dust Sources (cont.)** |
| **3-B Bulk Materials – continued** |
| *Off-Site Transporting of Bulk Materials*  No bulk materials will be transported to or from the project site.  Materials for transport will be wetted as needed.  Covers will be used, as needed. Some or all of the following will be used as necessary:   * The interior of emptied truck cargo compartments will be cleaned or covered before leaving the site. * Spillage or loss of bulk materials from holes or other openings in the cargo compartment’s floor, sides, and tailgates will be prevented. * Haul trucks will be covered with a tarp or other suitable cover or will be loaded such that the freeboard is not less than six inches when transported on any paved public access road to or from the project site. |
| *Outdoor Transport using a Chute or Conveyor*  No chutes or conveyors will be used.  Chute or conveyor will be fully enclosed.  Water spray equipment will be used to sufficiently wet the materials.  Transported materials will be washed or screened to remove fines (PM-10 or smaller). |
| **3-C Comments – Control of Fugitive Dust Sources** |
| Click here to enter text. |
| **Section 4 – Dust Control Methods** |
| **4-A Water Application**  Complete this section if water application will be used as a control method for limiting visible dust emissions and stabilizing surface areas. Check and answer everything that applies. Checked boxes represent methods that will be used ***as needed***. |
| *Water Application Equipment:*  Sprinklers:  Describe the activities that will utilize sprinklers: \_Click here to enter text.\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Water Truck, Water Trailer,  Water Wagon,  Other: \_Click here to enter text.\_\_  Describe the activities that will utilize this equipment: Click here to enter text.\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Water application equipment is available to operate after normal working hours, on weekends, and holiday.  After-hours contact: Click here to enter text.\_ Phone number: Click here to enter text.\_\_ |
| *Water Supply (as needed):*  Fire hydrants. Obtain necessary approval to use specific hydrants.  Storage tanks Number and capacity: \_\_Click here to enter text.\_  Wells Number and flow rate: \_\_Click here to enter text.  Canal, River, Pond, Lake, etc. Describe: \_Click here to enter text.\_\_\_\_  Approval granted by the owner or public agency to use their water source for this project.  Owner or Agency: \_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_  Contact: \_\_Click here to enter text. Phone number: \_\_Click here to enter text.  Other: Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **Section 4 – Dust Control Methods (cont.)** |
| **4-B Dust Suppressant Products**  Suppressant materials include, but are not limited to: hygroscopic suppressants (road salts), adhesives, petroleum emulsions, polymer emulsions, and bituminous material (road oils).  Copy this section if more than one dust suppressant product will be used. |
| Not applicable. Only water application will be the control method used. |
| Applicable.  Product Name: \_Click here to enter text.\_\_  Application Equipment: \_Click here to enter text.\_\_\_  Number of Application Equipment Available: \_\_\_Click here to enter text.\_\_  Attach each of the following information that fully describes this product. Use the checklist below to make sure all information is submitted with this plan.  Product Specifications (MSDS, Product Safety Data Sheet, etc.).  Manufacturer’s Usage Instructions (method, frequency, and intensity of application).  Environmental impacts and approvals or certifications related to the appropriate and safe use for ground application. |
| **4-C Other Dust Control Methods** |
| Check the other types of dust control methods that will be implemented at the construction site. |
| Physical barriers for restricting unauthorized vehicle access:  Fences  Gates  Posts  Berms  Concrete Barriers  Other: \_\_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_  Wind barriers – Describe: \_\_\_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_  Posted speed limit signs meet state and Federal Department of Transportation standards.  Posted at 15 miles per hour,  Posted at \_\_\_\_\_\_\_\_ miles per hour (less than 15 mph)  Re-establish vegetation for temporarily stabilizing previously disturbed surfaces.  Explain: \_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Apply and maintain gravel:  On haul roads  On access roads  At equipment storage yards  At vehicle traffic areas  For temporarily stabilizing previously disturbed areas.  Explain: \_\_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Apply pavement – Explain: \_\_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other: \_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **4-D Comments – Dust Control Methods** |
| Click here to enter text. |

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| **Section 5 – Carryout and Vehicle Trackout** |
| **5-A Treatments for Preventing Vehicle Trackout** |
| Trackout is any material that adheres to vehicle tires and is deposited onto a paved public road or the paved shoulder of a paved public road. Check one or a combination that will apply. |
| *Grizzly:* Rails, pipes, or grates used to dislodge debris off of vehicles before exiting the site. Extends from the intersection with the paved public road surface for the full width of the unpaved exit surface for the distance of at least 25 feet.  Describe: \_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Gravel Pad:* A layer of washed gravel at least one inch or larger in diameter, three inches deep, and extends from the intersection with the public paved road surface for the full width of the unpaved exit surface for a distance of at least 50 feet.  Describe: \_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Paved Surface:* Extends from the intersection with the paved public road surface for the full width of the unpaved access road for at least 100 feet to allow mud and dirt to drop off of vehicles before exiting the site.  Describe: \_\_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Mud and dirt deposits accumulating on paved interior roads will be removed with sufficient frequency, but not less frequently than once per workday.  Clean-up Frequency: \_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Wheel Washer:* Uses water to dislodge debris from tires and vehicle undercarriage.  Describe: \_\_Click here to enter text.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Other:* \_\_ Click here to enter text. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **5-B Treatments for Preventing Carryout** |
| Carryout occurs when materials from emptied or loaded haul trucks, vehicles, or trailers falls onto a paved public road or paved shoulder of a paved public road. Check all methods that apply. |
| No haul trucks will be routinely entering or leaving the project site. |
| *Emptied Haul Trucks:*  Interior cargo compartments will be cleaned before leaving the project site.  Cargo compartment will be covered with a tarp or suitable cover before leaving the project site.  *Loaded Haul Trucks:* Spillage or loss of materials from holes or other opening in the cargo compartment will be prevented when material is transported onto any paved public access road.  Haul trucks will be loaded such that the freeboard is not less than six inches with water applied to the top of the load before leaving the project site.  Cargo compartment and load will be covered with a tarp or suitable cover before leaving the project site.  Other: Click here to enter text.\_ |
| **5-C Cleaning up Carryout and Trackout** |
| Clean up Method: Check the method(s) below that will be used for cleaning carryout and trackout.  Manually sweeping and picking up.  Mechanical sweeping with a rotary brush or broom accompanied or preceded by water.  Describe the types of equipment that will be used: \_\_Click here to enter text.\_\_  Operating a PM10-efficient street sweeper.  Make and Model: \_\_Click here to enter text.\_\_\_  Flushing with water – allowed if:   * No curbs or gutters are present. * Using water will not result as a source of trackout and carryout. * Using water will not result in adverse impacts on storm water drainage systems. * Using water will not violate any National Pollutant Discharge Elimination System permit program or Alaska Department of Environmental Conservation, Division of Water Permit. |
| **5-D Comments - Carryout and Trackout** |
| Click here to enter text. |

1. Based on EPA AP-42 emission factors in Chapter 3.4, a diesel engine, or engines (greater than 600 hp each) with a cumulative rating of greater than 2,280 bhp will exceed 100 TPY for oxides of nitrogen (NOx) if the engines do not qualify as nonroad engines under 40 C.F.R. 1068.30. [↑](#footnote-ref-1)
2. Air Quality’s General Permits Website: <https://dec.alaska.gov/air/air-permit/general-permits/>. [↑](#footnote-ref-2)
3. Air Quality’s General Permits Website: <https://dec.alaska.gov/air/air-permit/general-permits/>. [↑](#footnote-ref-3)
4. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. See *Attachment 1: Definitions* for complete definition. [↑](#footnote-ref-4)
5. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. See *Attachment 1: Definitions* for complete definition. [↑](#footnote-ref-5)
6. This should include a street number or legal description of the property. For a portable stationary source operating at a location without an address, describe the location to the nearest landmark. [↑](#footnote-ref-6)
7. Responsible Official is defined in 18 AAC 50.990(93). See *Attachment 1: Definitions*. [↑](#footnote-ref-7)
8. Maximum rated capacity of asphalt production in tons per hour (TPH). This number is the maximum that the plant can produce, not the typical production for your facility. [↑](#footnote-ref-8)
9. Engineering data, Source Test, Vendor data. [↑](#footnote-ref-9)
10. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. See *Attachment 1: Definitions* for complete definition. [↑](#footnote-ref-10)
11. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. See *Attachment 1: Definitions* for complete definition. [↑](#footnote-ref-11)
12. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. See *Attachment 1: Definitions* for complete definition. [↑](#footnote-ref-12)
13. Air Quality’s General Permits Website: <https://dec.alaska.gov/air/air-permit/general-permits/>. [↑](#footnote-ref-13)
14. Assessable emissions do not include emissions from diesel engines that meet the definition of nonroad engine in 40 C.F.R. 1068.30. [↑](#footnote-ref-14)
15. Air Quality’s General Permits Website: <https://dec.alaska.gov/air/air-permit/general-permits/>. [↑](#footnote-ref-15)
16. Air Quality’s General Permits Website: <https://dec.alaska.gov/air/air-permit/general-permits>. [↑](#footnote-ref-16)
17. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. [↑](#footnote-ref-17)
18. Nonroad engine is defined in [40 CFR 1068.30](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068/subpart-A/section-1068.30) and adopted by reference in 18 AAC 50. See *Attachment 1: Definitions* for complete definition. [↑](#footnote-ref-18)
19. Assessable emissions do not include emissions from diesel engines that meet the definition of nonroad engine in 40 C.F.R. 1068.30. [↑](#footnote-ref-19)