

For office use only:

Reviewed by: _____ Date: _____

- COMPLETE
- INCOMPLETE
- DOES NOT QUALIFY Specify: _____

Section 1

1. Type of Application

Check one:

- Application for Title I Minor General Permit 3 (MG3) for sources with a potential to emit (PTE) more than 10 tons, but less than 100 tons of a regulated pollutant per year.
- Application for Title V Major General Permit 3 (GP3) for sources with a PTE 100 tons or more of a regulated pollutant per year.
- Renewal application for Title V Major General Permit 3 (GP3) have existing GP3 permit. Current Permit # _____

To determine your stationary source's PTE complete the worksheet in Attachment 1. Regulated pollutant has the meaning given in 40 C.F.R. 71.2.

2. Type of Asphalt Facility

Check one:

- This application is for a continuous drum asphalt facility.
- The application is for a batch dryer asphalt facility.

3. Diesel Generator

Check one:

- This asphalt facility will utilize a stationary diesel generator/s to provide electrical power.
- This asphalt facility will utilize a diesel generator/s to provide electrical power but the diesel generator/s meets the definition of a nonroad engine (see Attachment 2) and will not remain at the same location for more than 12 months.
- This asphalt facility will utilize highline power and will not have a diesel generator.

4. Asphalt facility General Operating Permit Application Fee

Check one:

- For a Title I minor permit application, the applicable permit administration fee listed in 18 AAC 50.400(c)(1) is included.
- For a Title V major permit application, the applicable permit administration fee listed in 18 AAC 50.400(a)(9) is included.

Note: fees are subject to change. To ensure the correct fee is submitted, refer to the Alaska Administrative Code 18 AAC 50 or contact the Department for assistance.

5. Rock Crusher

- This asphalt facility will operate a rock crusher/s in conjunction with this permit.

Note: Available only in the Title V Major General Permit. Minor sources will need to obtain a separate General Permit 9 (GP9) for rock crushers.

6. Qualifying Criteria

Sources requiring a Title I Minor General Permit 3 for Asphalt facility:

- An asphalt facility with a rated capacity of at least five tons per hour of product;
- An emission unit with a rated capacity of 10 million Btu or more per hour in a sulfur dioxide special protection area;
- An asphalt facility with a PTE that is greater than
 - 15 tpy but less than 100 tons per year (tpy) of PM-10;
 - 40 tpy but less than 100 tpy of sulfur dioxide;
 - 40 tpy but less than 100 tpy of nitrogen oxides; or
 - 0.6 tpy of lead.

Sources requiring a Title V Major General Permit 3 for asphalt facility:

- A asphalt facility having a PTE greater than 100 tpy of a regulated air contaminant;
- A asphalt facility emitting or having the PTE 10 TPY or more of a hazardous air pollutant or 25 TPY or more, in the aggregate, of two or more hazardous air pollutants;
- A asphalt facility with equipment subject to a Federal emission standard;
- An asphalt facility that contains another stationary source designated by the federal administrator by regulation.

To determine your asphalt facility's PTE complete the worksheet in Attachment 1

Regulated pollutant has the meaning given in 40 C.F.R. 71.2

Alaska law allows ADEC to issue a Title V general operating permit under AS 46.14.210 and a Title I general operating permit under AS 46.14.211 for similar types of operations. Operators prefer general operating permits because of their relative low cost as compared to stationary source specific permits.

To obtain a GP3 or MG3 permit, you must complete this application and send it to:

Alaska Department of Environmental Conservation
Air Permits Program
619 E. Ship Creek, Suite 249
Anchorage, AK 99501

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

Your asphalt facility will require either a baghouse and/or venturi wet scrubber to control particulate emissions (PM). Asphalt facilities constructed, modified or reconstructed after June 1973 are subject to NSPS Subpart I.

By completing this application, the owner or operator acknowledges that the asphalt facility operated under this permit is required to be operated with a control device to control PM emissions.

If the stationary source operates in the Unalaska or St. Paul areas, the stationary source must burn a fuel oil with a sulfur content no more than 0.075% Sulfur by weight. These areas have been designated as special protection areas (delineated in Section 11 and in Attachment 1).

If this stationary source would like to **remediate soils**, the owner must also apply for a soil remediation permit. Please see the ADEC's general permit for soil remediation units (GP-4). The stationary source may apply for a specific Title I or Title V permit that would cover all aspects of their operation, but have the flexibility to operate under two general permits.

If this stationary source would like to operate a **rock crusher** and is applying for a **MG3**, for asphalt facilities, they will need to apply for a separate general permit (GP9) for rock crushers in addition to the MG3.

7. Disqualifying Criteria

- a. 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.

Yes (you do not qualify for this permit, contact ADEC) **No**

- b. Answer this question only if your stationary source generates its power or process equipment using diesel engines larger than 500kW (~650 hp). If the stationary source has a diesel engine, is the engine's exhaust stack height higher than 12 feet, as measured from the ground and does it exhaust unrestricted vertically?

If engines have exhaust stacks less than 12 feet high as measured from the ground, the stationary source might violate the ambient air quality standards. The engine exhausts must be unrestricted and exit the stack vertically. The department requires stationary sources with diesel engine exhaust stacks that do not have stack outlets higher than 12 feet from the ground or that have restricted flow to obtain a stationary source specific operating permit. Obtaining this permit will require an ambient air modeling demonstration. □

Yes **No** (you do not qualify for this permit, contact ADEC)

- c. Does the stationary source conduct have a crusher with mechanically induced air flow? (This question is only applicable to asphalt facilities applying for the Title V GP3 permit. Crusher operation is not authorized for asphalt facilities applying for a Title I MG3 permit.)

Yes (you do not qualify for this permit, contact ADEC) **No**

Application General Permit to Operate an Asphalt Stationary source

d. Does the stationary source have a source subject to a federal emission standard in 40 CFR 61 or 63? (This question is only applicable to asphalt facilities applying for the Title V GP3 permit.)

Yes (you do not qualify for this permit, contact ADEC) **No**

e. Does the stationary source have a gas turbine?

Yes (you do not qualify for this permit, contact ADEC) **No**

f. Does the stationary source have an incinerator?

Yes (you do not qualify for this permit, contact ADEC) **No**

g. Will the stationary source follow the location considerations specified in Section 2?

Yes **No** (you do not qualify for this permit, contact ADEC)

8. Alaska Coastal Management Plan

Sources that will operate within the boundaries of a coastal district shall comply with Coastal District Plant Designated Area Enforceable Policies in accordance with 11 AAC 114.250.

This stationary source will not be located in a coastal district. Should the stationary source be relocated to a coastal district the stationary source will comply with the enforceable policies of that district.

This stationary source will be located within the boundaries of a coastal district and will comply with all enforceable policies of that district.

Provide the name of the coastal district the stationary source will be located in.

Section 2 Location Considerations

When applying for an application to operate an asphalt facility, the applicant should consider the permit conditions relating to selecting an operating site for the asphalt facility. The permit condition relating to the location of the asphalt facility is reproduced here in its entirety.

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

65. Location

[18 AAC 50.110, 5/26/72; 18 AAC 50.201, 10/1/04]

- 65.1 The Permittee may not operate the facility under this permit at a location less than 330 feet from the nearest residence.
- 65.2 The Permittee may move to and operate the facility under this permit at a location between 400 and 1000 feet of the nearest residence for a period of not more than two construction seasons during the effective period of this permit. If the facility was moved to such a location before the effective date of this permit and after January 1, 2002, the Permittee may operate the facility for a period of not more than one construction season under this permit at that location.
- 65.3 The operator shall provide notice to the Department at least 10 days in advance of the move of any crusher operation by using the Application Addendum (Location Change) in *Section 14* of this permit.

[18 AAC 50.045(d), 10/1/04; and 18 AAC 50.040(e), 7/25/08]

[18 AAC 50. 326(j)(3), & 50.010, 10/1/04]

NOTE: *The above setback distances are minimum requirements. Permittees should give adequate consideration to local siting issues which may exist within a given area. Poor siting can lead to public complaints regarding dust impacts and/or impacts from other air pollutants. The Department does investigate these types of public complaints. These investigations could result in:*

1. *a formal request under 18 AAC 50.201 that the Permittee demonstrate, by air quality dispersion modeling or other means, that the air quality impacts are not violating State air quality standards or increments; or creating a public nuisance (under 18 AAC 50.110);*
2. *the requirement to reduce emissions or implement another control strategy to reduce the ambient impact of those emissions as necessary to ensure that the concentration of air pollutants does not exceed the State air quality standards or increments; or the concerns listed in 18 AAC 50.110;*
3. *a requirement to install and operate air quality monitoring equipment; or*
4. *the requirement to obtain a site specific permit with which would contain requirements tailored to that exact operation.*

Section 3 Stationary source Identification Information

Stationary Source Name _____

Stationary Source Location _____

UTM Coordinates or _____

Latitude/Longitude _____

Physical Address _____

Stationary Source Contact Person _____

Mailing Address _____

Telephone Number _____

Legal Owner _____

Mailing Address _____

Telephone Number _____

Permittee (*if different from owner*) _____

Mailing Address _____

Telephone Number _____

Responsible Official _____

Mailing Address _____

Telephone Number _____

Stationary Source's Consultant (*if applicable*) _____

Mailing Address _____

Telephone Number _____

Designated Agent _____

Mailing Address _____

Telephone Number _____

Billing Contact Person _____

Mailing Address _____

Telephone Number _____

Individuals from your organization, authorized to incur fees (please include consultants, if applicable) _____

See next page for instruction to this section

SIC Codes: (circle the applicable code(s))

1611 for road paving

1771 for private residential paving

Instructions for Section 3. Where applicable, please provide fax numbers and e-mail addresses.

Stationary Source Name: The name of the stationary source that to be operating this permit.

Stationary Source Location: Provide either the UTM coordinates or the latitude and longitude where the Asphalt Plant will operate.

UTM Coordinates: the stationary source's Universal Transverse Mercator (UTM) coordinates.

Latitude/Longitude: The stationary source's Latitude and Longitude coordinates.

Physical Address: the stationary source's address. 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.

Stationary Source Contact Person: The name of the individual responsible for the stationary source's day-to-day operations.

Mailing Address: The business address where the person receives mail.

Telephone Number: The contact person's telephone number.

Legal Owner: The stationary source's legal owner. The legal owner could be either a person or a company.

Mailing Address: The owner's mailing address.

Telephone Number: The owner's telephone number.

Permittee: The entity applying for the permit. This can be either the owner or the operator of the asphalt facility.

Mailing Address: The Permittee's mailing address.

Telephone Number: The operator's telephone number.

Responsible Official: See *Attachment 2* definitions.

Mailing Address: The Responsible Official's mailing address.

Telephone Number: The Responsible Official's telephone number.

Stationary Source's Consultant Name: If applicable, the name of the business or entity that prepared the application and/or prepares reports.

Mailing Address : The consultant's mailing address.

Telephone Number: The consultant's telephone number.

Designated Agent: The designated agent's name. 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.

Mailing Address: The designated agent's mailing address.

Telephone Number: The designated agent's telephone number.

Billing Contact: The billing contact's name.

Mailing Address: The billing contact's mailing.

Telephone Number: The billing contact's telephone number.

Individuals Authorized to Incur Fees – The department charges a fee for staff time, per 18 AAC 50.400 (m). Staff time includes answering questions, working on applications, and issuing permits. List any individual with your organization that you authorize to incur department fees. Please include any consultants that you want the Department to work with.

SIC Codes: Circle one or both codes as they apply to your stationary source.

Section 4 Source Information

Dryer/Drum:

Is this asphalt facility a Dryer batch processing unit or a Drum continuous processing unit?

Dryer/Drum (circle one)

For the purpose of this permit application, asphalt facilities 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 facilities with a drum proportion the mix by a continuous volumetric proportion system and mixes the asphalt oil and aggregate in the drum.

Make of asphalt drum/dryer _____

Model # of asphalt drum/dryer _____

Serial # of asphalt drum/dryer** _____

Year of manufacture _____ Portability Yes/No (circle one)

Primary Burner: Size ** _____ Btu/hr Chamber Size** _____ cubic feet

Maximum fuel feed ** _____ gallon/hr

Fuel type natural gas/propane/diesel/other (specify) _____

Maximum rated capacity of asphalt production (tons per hour) _____

Control Equipment (check boxes that apply and complete the required information)

Primary dust collector

- Cyclone _____ particle size removed
- Knockout Box (settling chamber) _____ particle size removed
- Other (specify) _____ particle size removed _____

Secondary dust collector

- Baghouse
- Scrubber

Make # _____

Model # _____

Serial # ** _____

Year of manufacture _____ Capture efficiency* _____ %

** Denotes items not required to complete the application.

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Control efficiency * _____ % Efficiency determined by _____

Significant operating parameters and set points _____

Baghouse/Scrubber exhaust stack height* _____ Stack diameter* _____

Exit gas temp* _____ Exit gas velocity* _____

Actual exit gas flow rate* _____ Data source _____
(Engineering data, Source test, Vendor data)

Location

(Note: any time the asphalt stationary source is moved, the new location must be provided using the application addendum included in the permit)

Latitude _____ Longitude _____ or

UTM Coordinates: Zone _____ Northing _____ Easting _____

Datum _____

Electrical Power Generation for Asphalt Stationary source

Make _____ Model # _____

Serial # _____ Year of Manufacture _____

Portability Yes/No (circle one)

Is the diesel generator Stationary or Nonroad? Yes/No (circle one)

Design capacity* _____ hp, kW, MW

Maximum nameplate capacity* _____ MW

Maximum fuel rate _____ gal/hr or MMBtu/hr
(circle one)

* Items marked with an asterisk (*) are reported to US EPA in the National Emissions Inventory
September 3, 2008

Secondary Generator

Make # _____ Model # _____

Serial # _____ Year of Manufacture _____

Portability Yes/No (circle one)

Is the diesel generator Stationary or Nonroad? Yes/No (circle one)

Design capacity* _____ hp, kW, MW

Maximum nameplate capacity* _____ MW

Maximum fuel rate _____ gal/hr

Electrical Power Generation for Rock Crusher

Make # _____ Model # _____

Serial # _____ Year of Manufacture _____

Portability Yes/No (circle one)

Is the diesel generator Stationary or Nonroad? Yes/No (circle one)

Design capacity* _____ hp, kW, MW

Maximum nameplate capacity* _____ MW

Maximum fuel rate _____ gal/hr

Other Equipment

- Material handling devices such as:
 - Conveyors,
 - Loaders,
 - Bins,
 - Elevators,
 - Screens, or
 - Chutes
- Asphalt cement heaters (fuel fired),
- Asphalt oil heaters (fuel fired),
- Silo heaters (fuel fired),
- Insignificant sources, or
- Other _____
- Was the stationary source constructed, before June 11, 1973?
- Was the stationary source constructed, modified, or reconstructed¹ after June 11, 1973?

¹ See 40 C.F.R. 60.115 for a definition of constructed and modified.

Section 5 Rock Crushers

The MG3 and your rock crusher:

The minor general permit for asphalt facilities does not incorporate provisions for operation of a rock crusher. Asphalt facilities operating an asphalt facility under the MG3 will need to apply for a separate permit to operate a rock crusher.

The GP3 and your rock crusher:

The general permit incorporates provisions for the operation of a rock crusher. A stationary source may operate one or more rock crushers under the auspice of this permit.

A rock crusher needs to be listed on the permit application to be covered under the GP3 but does not need to be located at the same location as the asphalt facility.

A rock crusher operated under the GP3 shall comply with the terms and conditions of the permit to include monitoring, recordkeeping, and reporting.

Electrical power for the operation of the rock crusher may be from a separate diesel generator than the diesel generator that provide power to the asphalt plant. The generator must be included in the permit application and included in the stationary source's PTE calculations. Emissions from nonroad diesel engines are not included in the stationary source's PTE, but are required to be reported in the stationary source's emission fee estimates.

A public access control plan must be included with the permit application. The plan must contain a topographic map (or maps) that clearly shows the crusher and the surrounding 20 mile radius, including road-ways and any permit-related stationary source/areas; boundaries that are consistent with the applicable land owner's authorization to preclude public access from the area within the boundaries; defined methods of establishing and maintaining the boundary, such as physical barriers, surveillance and the posting of strategically located warning signs (provide size, wording, and inspection/repair schedule); the date of the Access Plan; and the procedure for approaching members of the public who have crossed the ambient air boundary.

An applicant agrees with the provisions in the Department's Prevention of Fugitive Dust plan provided in *Section 17* of the permit. An applicant may submit their own plan for the prevention of fugitive dust however; the plan must have Department approval.

Siting restrictions apply to the location of any rock crushers operating under this permit.

Diesel generator operation for the rock crusher must adhere to the provisions in the permit for diesel engine operation.

Crusher Source List

Please identify any of the following equipment that makes up your rock crushing operation by placing an “x” in the box, and filling in any requested information. *Do not include any conveyors, generators, or other equipment that are part of the asphalt facility and listed in Section A. If additional room is needed to complete the emission inventory of your rock crusher operation, please attach the additional information to the application.*

Initial crushers (*list all initial crushers regardless of size or age*)

Equipment Id. _____ Rated capacity _____ tons per hour Date built: _____
Equipment Id. _____ Rated capacity _____ tons per hour Date built: _____
Equipment Id. _____ Rated capacity _____ tons per hour Date built: _____
Equipment Id. _____ Rated capacity _____ tons per hour Date built: _____
Equipment Id. _____ Rated capacity _____ tons per hour Date built: _____

Screening Operations

Equipment Id: _____ Date built: _____
Equipment Id: _____ Date built: _____

Belt Conveyors

Equipment Id: _____ Date built: _____
Equipment Id: _____ Date built: _____

Bucket Elevators

Equipment Id: _____ Date built: _____
Equipment Id: _____ Date built: _____

Storage bins

Equipment Id: _____	Date built: _____
Equipment Id: _____	Date built: _____
Equipment Id: _____	Date built: _____
Equipment Id: _____	Date built: _____
Equipment Id: _____	Date built: _____
Equipment Id: _____	Date built: _____

Stationary fuel storage tanks

Date Installed _____	Capacity _____ (gallons)
Date Installed _____	Capacity _____ (gallons)

Nonmetallic Mineral Processing Facilities Subject to NSPS Subpart OOO (Rock Crushers and Conveying Equipment)

A processing facility is any combination of equipment used to crush or grind any non-metallic mineral including each

- Crusher or Grinding mill
- Screening operation
- Bucket elevator
- Belt conveyors and belt conveyor transfer points
- Storage bin

A Subpart OOO processing facility is a facility that:

- Is constructed, reconstructed (see 40 CFR 60.15 for specific definition), or modified after August 31, 1983;
- Has a cumulative rated initial grinding capacity larger than 150 tons per hour for a portable plant or 25 tons per hour for a fixed plant.

Processing facilities that are subject to NSPS Subpart F or I are excluded from Subpart OOO.

Subpart 000 Source Information

Information to determine Subpart 000 applicability.

1. Does your stationary source have initial crushers with a cumulative rating larger than 150 tons per hour for a portable plant or 25 tons per hour for a fixed plant?
 Yes No

2. Do you have any crushing equipment² constructed, reconstructed³, or modified after August 31, 1983?
 Yes No
If you answered yes to both questions, your rock crusher is subject to NSPS Subpart 000.

3. Are any conveyor transfer points or other sources of particulate matter emissions enclosed in a building?
 Yes No

4. Does any structure have mechanically induced airflow to exhaust particulate emissions?
 Yes No

5. Is any equipment in your rock crushing process exhausted to a baghouse, cyclone, or wet scrubber (excluding the drum or dryer)?
 Yes No

If you answered yes to questions 3 – 5, you do not qualify for the general permit and will need to consult with the Department for a Title V Operating Permit.

² Crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed trucks or railcar loading stations are listed in 40 C.F.R. 60.670 as crushing equipment.

³ See the definition in 40 CFR 60.673

Section 6 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 PTE in quantities greater than 10 tpy. The quantity for which fees will be assessed is the lesser of the stationary source's assessable PTE measured in tpy; or the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30.

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

Use Attachment 1 as a guide for completing the emissions fee estimate. 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 produced.
2. Hours, or expected hours, of operation of the diesel engine/s.

For determining the emission fee estimate for the asphalt facility, substitute the estimated actual hours of operation in Equation 1, in Attachment 1, for the potential hours of operation used to determine PTE. Enter the amount in tons for each pollutant under the Asphalt Facility column in the form in *Attachment 4*.

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 facility. If the asphalt facility is operated at less than the maximum rate of production, use that rate in place of the rated capacity.

To determine the emission fee estimate for the diesel generator/s, substitute the actual hours of operation in either

Equation 2 or Equation 3, in Attachment 1, for potential hours of operation. Enter the amount in tons for each pollutant under the Diesel Generator column in the form in *Attachment 4*.

Total the estimated emissions from the Asphalt Facility and the Diesel Generator/s for each pollutant. Enter the total amount in the Total Estimated Emissions block.

The current emission fee rate may be found in 18 AAC 50.410.

Section 7 Other Documents Required

In addition to this application, please include:

- ❑ a source test for the asphalt facility or a manufacturer's certification that the asphalt facility will meet the grain loading standard of 0.04 gr/dscf for asphalt facility constructed or modified after June 1973, or 0.05 gr/dscf for asphalt facilities constructed before June 1973. (See items 1 – 3 below)
 - ❑ certification that the diesel engine generator will meet the grain loading standard for fuel burning equipment of 0.05 gr/dscf. (See item 4 below)
 - ❑ process flow diagrams and stack heights. (See item 5 below)
 - ❑ operation and Maintenance Plan (see Section 10 of the application for plan content suggestions and item 6 below)
 - ❑ a fugitive dust control plan that addresses each fugitive dust source, if located within one mile of the nearest residence or other inhabited structure. See the applicable permit for details on the fugitive dust control plan.
1. A copy of the most recent source test showing compliance with the grain loading standard applicable to your plant. If the stationary source has not conducted a recent source test (within the last 5 years or 7200 operating hours whichever is less), submit a schedule indicating when you will perform the source test. The test shall be within thirty (30) operating days after receiving authorization to operate under the GP3 or the MG3.
 2. For new stationary sources that have not had a source test, a certification from the manufacture/vendor that the stationary source will meet the grain loading standard of 0.04 gr/dscf.
 3. For asphalt facilities that are used but new to the State, a source test that shows the asphalt facility meets the grain loading standard of 0.04 gr/dscf for asphalt facilities constructed or modified after June 1973, or 0.05 gr/dscf for asphalt facilities constructed before June 1973 or a certification from the manufacture that the stationary source will meet the grain loading standard.
 4. There is some question whether engines less than 200 hp meet the particulate matter standard of 0.05 grains per dry standard cubic feet. For engines of this size please include 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.
 5. Stationary source process diagrams show the typical stationary source process including the stack heights and identify each emission point and control device.
 6. The manufacturer's operating and maintenance manual that describes when preventative maintenance should occur and how to operate the equipment.

Section 8 Insignificant Sources

Identify any insignificant source at your stationary source by placing an “x” in the box adjacent to the insignificant source. Insignificant sources are based on size and production rate basis, not air emission sources. Please see regulations 18 AAC 50.335(t) for more information.

- all storage tanks less than 10,000 gallons in size;
- fuel burning equipment, not including internal combustion engines, with a rated capacity less than 4,000,000 Btu/hr burning natural gas, butane, propane, or LPG;
- fuel burning equipment, not including internal combustion engines, with a rated capacity less than 1,700,000 Btu/hr burning kerosene, No. 1, or No. 2 fuel oil;
- Other _____.

(See 18 AAC 50 for the complete source lists.)

Section 9 Compliance Certification

This section is for major sources applying for a renewal to operate under the GP3. If this is an initial application or your source is classified as a minor source you do not need to complete the compliance certification of this section.

- This application is for an existing source. (Complete the compliance certification as described below.)
- The application is for an initial authorization to operate under the general permit.
- The application is for a minor source applying to operate under the MG3.

Any stationary source submitting an application for renewal must certify that it is in compliance with the terms and conditions of the general permit at the time the application is submitted.

To evaluate your stationary source's compliance status, complete the Annual Compliance Certification (ACC) in the General Permit 3 under which you operated and attach it to the application. The compliance certification shall encompass the period from January 1 of the current year until the date the application is signed. If the source has not operated during the compliance period, include the previous year's ACC.

A source submitting an application that is not in compliance with the terms and conditions of the permit will not be issued an authorization to operate under the GP3 until a compliance plan has been implemented to bring the source back into compliance. (18 AAC 50.345(c)(3)).

If a stationary source has always been in compliance with each term and condition of the permit, the source is determined to be "In Compliance" and should mark "Continuous" compliance.

If a stationary source has operated out of compliance for a specific condition of the permit but has corrected the noncompliance issue, the source is determined to be "in compliance" but the source would mark "Intermittent" compliance.

If a stationary source is not currently in compliance with a condition of the permit, the source's compliance status for that condition is "not in compliance".

Section 10 Operations and Maintenance Plan

The Department requires stationary source operators to develop an Operation and Maintenance (O&M) plan. This plan describes how the stationary source complies with emission standards listed in 18 AAC 50.055 (smoke and fugitive dust) on a continuous basis.

The following lists some considerations to incorporate into the stationary source specific O&M plan. This list is by no means comprehensive. The operators have the burden to show compliance with the emission limits. Good operations and maintenance of air pollution control equipment is a crucial element in complying with emission standards.

The O&M Plan is a written document updated on a regular basis and whenever the stationary source has a change in operations. The plan must be submitted to the ADEC as part of this application and it must be kept on site for operator referral.

Items to include in the O&M Plan:

- A. A blank copy of operator's inspection and maintenance forms, if applicable.
- B. A list of vendor contacts and suppliers for the air pollution control equipment, list the spare parts required on site by manufacturer.
- C. A summary of the maintenance tracking system used at this stationary source. This does not mean a complex computer system. It could be as simple as index cards that show when parts were replaced to track problems.
- D. List automated indicators/alarms that may aid the operator in determining malfunctions and correcting the problem.

Below are some suggestions to include in an O&M plan. Your written O&M plan may consist of nothing more than a checklist for the daily, weekly, monthly, and seasonal checks and records. If you already have and use an inspection checklist for air pollution sources at your asphalt facility, you may submit that as your PM plan. The plan should consider and discuss the following applicable sources and equipment.

Roads, workpads, and stockpiles

They should be wetted or treated to limit generation of fugitive dust.

Dryer and burner

- A. Excess air and damper setting should be set at least once per season. The dryer should be inspected to ensure it is operating properly.
- B. Cracks or holes in the dryer shell, or outlet plenum should be repaired as soon as practicable.
- C. Maintain the burner
 - Atomization device
 - Nozzle appropriate for fuel type
 - Cone
 - Air damper
 - Linkages
 - Fuel pressure regulator

Dry Cyclone (if applicable)

- A. Follow the manufacturer's guidelines for adjusting the vortex shield in order to maximize the cyclone efficiency.
- B. Every month inspect the cyclone's outside body, dust hopper, and dust removal device.
- C. At least once per season inspect the inside of the cyclone the inlet and outlet for wear.

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:

- A. Pressure at baghouse inlet inches water column
- B. Pressure at baghouse outlet inches water column
- C. Temperature at baghouse inlet
- D. Dust level in hopper
- E. Discharge pressure at air compressor for bag cleaning in psig
- F. Screw conveyor motor amps meter
- G. Visible emissions

Preventative Maintenance:

Weekly Maintenance Recommendations

- A. 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, repair leak
- B. Check inlet and outlet damper seals, repair if needed
- C. Thoroughly inspect bags, replace damaged bags, clamps, or cages, immediately
- D. Check all damper valves for proper operation, repair seal as necessary
- E. Check bag shaker assembly or compressed air lines including, filters, and dryers, replace parts as necessary
- F. Check operation and sequence of all compressed air valves, repair or replace malfunctioning valves

Monthly Maintenance

- A. Clean, Repair/replace bags per manufacturer's recommendation. Log work
- B. Inspect inside of housing for corrosion, repair any holes immediately and investigate the corrosion problems further
- C. Inspect door seals, repair as necessary

Instructions and Information

Wet scrubber (venturi scrubber)

Record manufacturer's specified pressure drop and flow rate.

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

- A. Gas pressure at scrubber venturi inlet, inches water column
- B. Gas pressure at scrubber venturi outlet, inches water column
- C. Scrubbing water inlet and outlet temperature, °F and pressure, psig
- D. Water Pump motor current draw, amps or water flow rate
- E. Visible emissions from stack. Excessive droplet carryover indicates poor mist eliminator performance

Preventative Maintenance

Weekly

- A. Check pump for leaking gland. Replace defective mechanical seal or packing
- B. Inspect piping valves and fittings for leaks or signs of corrosion replace corroded or faulty parts.
- C. Check the scrubber for holes and leaks, repair as necessary.
- D. If the scrubbing water appears muddy, check settling/cooling pond.

Monthly

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

Once per season

- A. Completely flush the scrubber piping and clean out instrument connections, check accuracy of instruments (pressure gauges, thermocouples etc.)
- B. Thoroughly inspect the scrubber body, venturi plate, and lining. Replace worn parts

Ductwork and induced draft fan

Preventative Maintenance

Weekly

- A. Make quick visual inspections for holes or leaks
- B. Operate dampers several times to insure proper operation
- C. Inspect fan bearings for proper oil level and temperature, excess vibration
- D. Check fan belts for proper tension, wear
- E. Thoroughly inspect stack for holes, crack, leaks, and repair as necessary

Monthly

- A. Inspect ductwork for leaks
- B. Inspect the fan bearing housing for leaks and cracks, repair as necessary
- C. Open the fan housing and inspect the wheel for abrasion, corrosion, and material buildup

Once per season

- A. Thoroughly inspect damper blades for wear, replace if necessary
- B. Inspect automatic damper drives, bearings, repair or replace as necessary
- C. Thoroughly inspect all ductwork joints and seals for tightness and check tightness of flange bolts, repair

Instructions and Information

Diesel Engines

Weekly checks

- A. Oil lube system maintenance
- B. Other Preventative Maintenance
 - 1. fuel filters/sediment bowl
 - 2. injector condition

Please explain corrective actions:

Section 11 Special Sulfur Dioxide Protection Areas

Two areas in the state have been defined as a special protection areas for sulfur dioxide under 18 AAC 50.025(c)(1).

The Unalaska area, the land and water areas within a 3.4-mile radius of the intersection of 53° 53' 4" N latitude and 166° 32' 11" W longitude; and

The St. Paul Island area, the land and water areas south of UTM Northing 6333.00 kilometers (57° 8' 29" N latitude) and within 0.6 kilometers of St. Paul Island.

The Special protection areas for sulfur dioxide are established to prevent the violation of the ambient air quality standard and maximum allowable ambient concentration for sulfur dioxide.

The maps in Attachment 3 show the areas defined as special protection areas for sulfur dioxide.

Areas defined as special protection areas for sulfur dioxide have the following restrictions on operation:

- 1) The stationary source must use diesel fuel with a sulfur content of $\leq 0.075\%$ by weight or use natural gas.
- 2) Diesel electric generators or other diesel engines may not be used. The asphalt facility must operate using high line power.

Section 12 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

Printed Name

Title

Attachment 1

Determining Potential to Emit (PTE)

Most asphalt facilities in Alaska operate on a seasonal basis due to the requirements that asphalt oil needs to be heated or it will solidify and the asphalt mix needs to be significantly above ambient temperatures for road paving. The calculations to determine PTE are based upon AP-42 emission factors and 5-months (3650 hours⁴) of operation. If your asphalt facility is located in an area where the asphalt mix production period of operation will exceed 5 months, contact the Department for further guidance.

When determining the PTE of an asphalt facility and/or rock crusher/s, take into consideration whether you will use a diesel engine for electrical power generation and whether that engine will be classified as a stationary source or a nonroad engine (see *Attachment 2*)

PTE for the asphalt drum/dryer. Provide the PTE for NO_x, CO, SO_x, PM-10, and VOC in tpy in Table A per **Error! Reference source not found.** in this attachment.

PTE for the diesel generator/s. Report the PTE for NO_x, CO, SO_x, PM-10, and VOC in tpy in Table A per **Error! Reference source not found.** in this attachment. If your stationary source operates more than one diesel engine, add the totals for all the diesel engines together before entering them in the appropriate column. If your stationary source does not use a diesel engine but uses highline electrical power, mark the appropriate blocks “Uses Highline Power”.

If your diesel generator is classified as a stationary source, add the total of each pollutant in the column labeled Stationary Source PTE with the amount listed in the “Asphalt facility” column.

If your diesel generator is classified as a nonroad engine, do not add the emissions from the diesel generator to the Stationary source PTE column. Only count the emissions from the asphalt facility column to the Stationary Source PTE column.

NOTE: If a nonroad engine is at the same location for more than 12 consecutive months, that engine is classified as a stationary engine from the date it first arrived at that location. Asphalt facilities may find that the emissions from the diesel generator would change their classification from a minor source (Title I) to a major source (Title V). Any source determined to be a major stationary source without a Title V GP3 would be found in violation and could be subject to enforcement actions and penalties.

⁴ 3650 hours determined by dividing 8760 hours by 12 months and multiplying by 5 months.

Table A Potential to Emit (PTE)

Pollutant	Asphalt Facility	Diesel Generator	Stationary Source PTE
NO _x			
CO			
SO _x			
PM-10			
VOC			

If your stationary source has 10 tpy or more of any one pollutant, but all pollutants are less than 100 tpy you qualify for a MG3, provided you do not have any disqualifying criteria listed in Section 1, paragraph 7.

If your stationary source has a total of any one pollutant that is 100 tpy or greater you need to obtain a Title V major operating permit. Providing you do not have any disqualifying criteria, the GP3 will satisfy this requirement.

Determining the PTE for the Asphalt Drum/Dryer

To determine the PTE for your asphalt facility, use **equation 1** for each pollutant. If the manufacturer has provided more accurate emission factors than the factors listed in this section, you may use those emission factors provided the Department approves the use of the factors and the methods used to perform the calculations. You may also use emission factors based upon the latest source test provided the source test has been approved by the Department. The calculations shall be recorded and kept on site for a minimum of five years. The calculations shall clearly reflect the emission factors used. If you are using emission factors based upon manufacturer’s data, attach the manufacturer’s data to the calculations.

Equation 1 (Asphalt Facilities)

$$(EF \times (\text{Potential hours of operation} * RC)) / \text{lbs per ton}$$

Where:

EF = emission factor

RC = rated capacity of asphalt facility in tons per hour

Potential hours of operation = 3650

lbs per ton = 2000

$$(EF \times (3650 * RC)) / 2000 = \text{tpy}$$

Emission Factors for Batch Mix Hot Mix Asphalt Facilities

Process	CO	NO _x	SO ₂	PM-10 ⁵	PM-10 ⁶	PM-10 ⁷	VOC
Natural gas-fired dryer, hot screens, and mixer	0.40	0.025	0.0046	4.5	0.027	ND	0.0082
No. 2 fuel oil-fired dryer, hot screens, and mixer	0.40	0.12	0.088	4.5	0.027	ND	0.0082

Emission factor units are lb per ton of hot mix asphalt produced. The preceding emission factors were compiled from AP42, 5th addition, Tables 11.1-1, 11.1-5, & 11.1-6

Emission Factors for Drum Hot Mix Asphalt Facilities (Continuous)

Process	CO	NO _x	SO ₂	PM-10 ⁸	PM-10 ⁹	PM-10 ¹⁰	VOC
Natural gas-fired dryer, hot screens, and mixer	0.13	0.026	0.0034	6.5	0.023	ND	0.032
No. 2 fuel oil-fired dryer, hot screens, and mixer	0.13	0.055	0.011	6.5	0.023	ND	0.032

Emission factor units are lb per ton of hot mix asphalt produced. The preceding emission factors were compiled from AP42, 5th addition, Tables 11.1-3, 11.1-7, & 11.1-8

Determining PTE for Diesel Engine Generator

To determine the PTE for the diesel generators, use either

Equation 2, emission factors expressed in lb/hp-hr or **Equation 3**, emission factors expressed in lb/MMBtu. Perform the calculation for each pollutant. If you operate more than one diesel generator, perform the calculations for each generator. If the manufacture has provided more accurate emission factors than the factors listed in this section, you may use those emission factors provided the Department approves the use of the factors and the methods used to perform the calculations. You may also use emission factors based upon the latest source test provided the source test has been accepted by the Department. The calculations shall be recorded and kept

⁵ Uncontrolled emissions. Note: uncontrolled emission factors are provided as a reference only. At no times are facilities allowed to operate the hot mix asphalt plant without a control device i.e. baghouse or wet scrubber.

⁶ Emissions controlled with a fabric filter (baghouse).

⁷ Emissions controlled with a wet scrubber (ND indicates there was no data for a PM-10 emission factor. Facilities may use the PM emission factor of 0.14 for total PM or use data from the manufacturer or source test data when computing PTE for plants using a wet scrubber).

⁸ Uncontrolled emissions. Note: uncontrolled emission factors are provided as a reference only. At no times are facilities allowed to operate the hot mix asphalt plant without a control device i.e. baghouse or wet scrubber.

⁹ Emissions controlled with a fabric filter (baghouse).

¹⁰ Emissions controlled with a wet scrubber (ND indicates there was no data for a PM-10 emission factor. Facilities may use the PM emission factor of 0.045 for total PM or use data from the manufacturer or source test data when computing PTE for plants using a wet scrubber).

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on site for a minimum of five years. The calculations shall clearly reflect the emission factors used. If you are using emission factors based upon manufacturer’s data, attach the manufacturer’s data with the calculations.

Equation 2 (Diesel Generators (lb/hp-hr))

$$((EF \times Hp) * \text{Potential hours of operation}) / \text{lbs per ton}$$

Where:

EF = emission factor

HP= horse power of unit

Potential hours of operation = 3650

lbs per ton = 2000

$$((EF * hp) * 3650) / 2000 = \text{tpy}$$

Equation 3 (Diesel Generators (lb/MMBtu))

$$((EF \times \text{MMBtu}) * \text{Potential hours of operation}) / \text{lbs per ton}$$

Where:

EF = emission factor

MMBtu = Manufacturer’s rated capacity

Potential hours of operation = 3650

lbs per ton = 2000

$$((EF \times \text{MMBtu}) * 3650) / 2000 = \text{tpy}$$

Emission Factors for Diesel Generators less than or equal to 600 hp

Pollutant	CO	NO _x	SO ₂ ¹¹	PM-10	VOC ¹²
Emission factor (lb/hp-hr) power output	6.68 E -03	0.031	2.05 E -03	2.20 E -03	2.47 E-05
Emission factor (lb/MMBtu) fuel input	0.95	4.41	0.29	0.31	0.35

Emission Factors for Large Diesel Engines more than 600 hp Diesel Fuel, Uncontrolled Emissions

Pollutant	CO	NO _x	SO ₂ ¹³	PM-10	VOC
Emission factor (lb/hp-hr) power output	5.5 E-03	0.024	8.09 E-03S ₁	0.0007	7.05 E-04
Emission factor (lb/MMBtu) fuel input	0.85	3.2	1.01S ₁	0.1	0.09

¹¹ Assumes that all sulfur in the fuel is converted to SO₂. S₁ = % sulfur in fuel oil. For example, if sulfur content is 1.5%, S = 1.5.

¹² AP-42 does not provide emission factors for VOC but instead provides emission factors for TOC. Stationary sources have the option to use the TOC emission factor in lieu of VOC from AP-42 or vendor specific emission factors for that unit if available.

¹³ Assumes that all sulfur in the fuel is converted to SO₂. S₁ = % sulfur in fuel oil. For example, if sulfur content is 1.5%, S = 1.5.

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Emission Factors for Large Diesel Engines more than 600 hp Diesel Fuel, Controlled Emissions¹⁴

Pollutant	CO	NO _x	SO ₂ ¹⁵	PM-10	VOC
Emission factor (lb/hp-hr) power output	5.5 E-03	0.013	8.09 E-03S ₁	0.0007	7.05 E-04
Emission factor (lb/MMBtu) fuel input	0.85	1.9	1.01S ₁	0.1	0.09

Emission Factors for Large Diesel Engines more than 600 hp Diesel Fuel, Uncontrolled Emissions

Pollutant	CO	NO _x	SO ₂ ¹⁶	PM-10	VOC
Emission factor (lb/hp-hr) power output	7.5 E-03	0.018	4.06 E-04S ₁ + 9.57	ND	5.29 E-03
Emission factor (lb/MMBtu) fuel input	1.16	2.7	0.05S ₁ + 0.895S ₂	ND	0.8

Note: AP-42 did not list an emission factor for controlled NO_x emissions for Dual-Fired Large Diesel Engine.

¹⁴ References 8-26. Controlled NO_x is by ignition timing retard.

¹⁵ Assumes that all sulfur in the fuel is converted to SO₂. S₁ = % sulfur in fuel oil; S₂ = % sulfur in natural gas. For example, if sulfur content is 1.5%, S = 1.5.

¹⁶ Assumes that all sulfur in the fuel is converted to SO₂. S₁ = % sulfur in fuel oil; S₂ = % sulfur in natural gas. For example, if sulfur content is 1.5%, S = 1.5.

Attachment 2 Definitions

Regulated air pollutant means the following:

- (1) Nitrogen oxides or any volatile organic compounds;
- (2) Any pollutant for which a national ambient air quality standard has been promulgated;
- (3) Any pollutant that is subject to any standard promulgated under section 111 of the Act;
- (4) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (5) Any pollutant subject to a standard promulgated under section 112 of the Act or other requirements established under section 112 of the Act, including sections 112 (g), (j), and (r) of the Act, including the following:
 - (i) Any pollutant subject to requirements under section 112(j) of the Act. If the Administrator fails to promulgate a standard by the date established pursuant to section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to section 112(e) of the Act; and
 - (ii) Any pollutant for which the requirements of section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to section 112(g)(2) requirements.

[40 CFR 71.2]

Responsible official means:

(A) 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

(i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million in second quarter 1980 dollars; or

(ii) the delegation of authority to the representative is approved in advance by the department;

(B) for a partnership or sole proprietorship, a general partner or the proprietor, respectively; and
(C) 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;

[18 AAC 50.990 (93)]

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine:

(i) 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); or

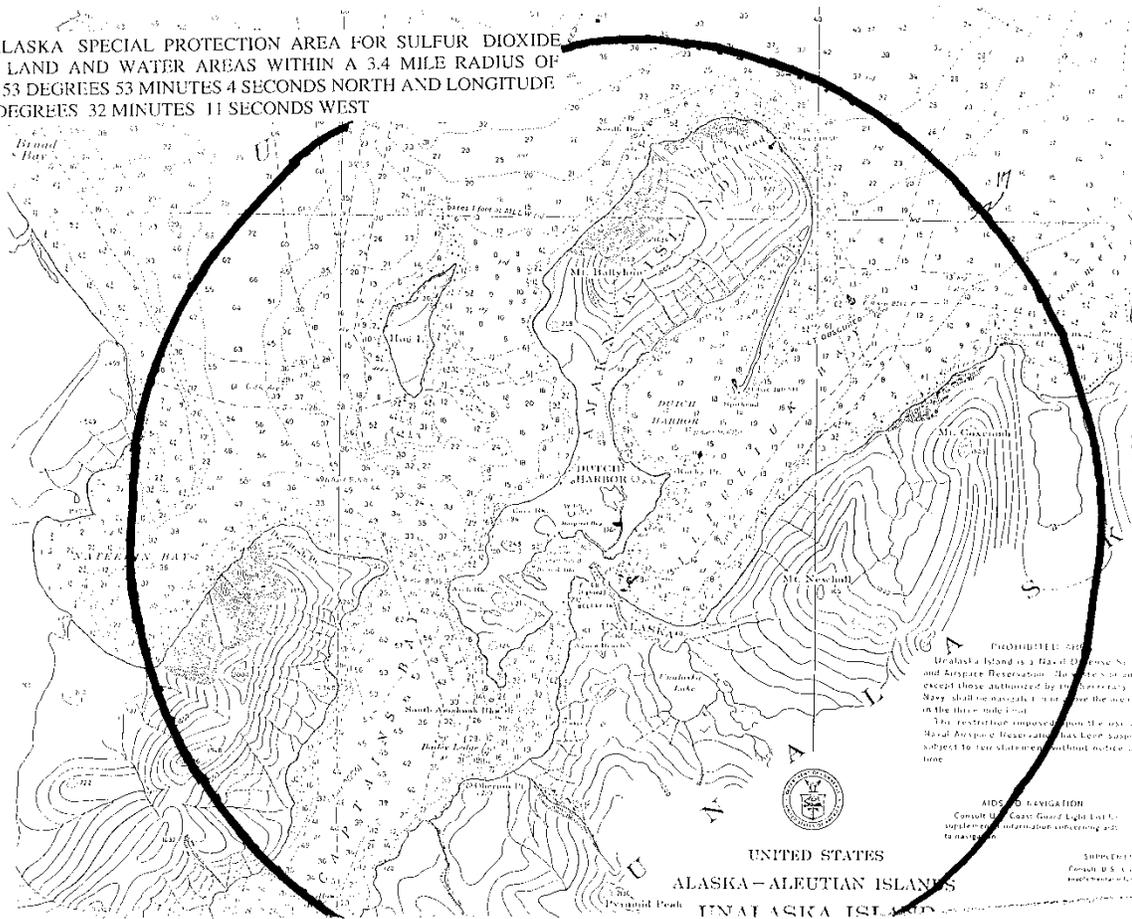
Instructions and Information

- (ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or
 - (iii) That, by itself or in or on a piece of equipment, 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:
- (i) the engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or
 - (ii) the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act; or
 - (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. 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 will be included 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. This paragraph does not apply to an engine after the engine is removed from the location.

[40 C.F.R. 89.2]

Instructions and Information

UNALASKA SPECIAL PROTECTION AREA FOR SULFUR DIOXIDE
ALL LAND AND WATER AREAS WITHIN A 3.4 MILE RADIUS OF
LAT 53 DEGREES 53 MINUTES 4 SECONDS NORTH AND LONGITUDE
166 DEGREES 32 MINUTES 11 SECONDS WEST



PROHIBITED: This Unalaska Island is a part of the National Preserve and Preserve Reservation. No activities are permitted except those authorized by the Secretary. No one shall be allowed to enter the preserve without the necessary permits. This restriction imposed upon the use of Naval Air Station Unalaska has been suspended subject to two statements without notice of force.

AIDS TO NAVIGATION
Consult the Coast Guard Light List for complete information concerning aids to navigation.

INTRODUCTION
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Attachment 4 Emission Fee Estimate

Submit the following information to the Department at the same time when submitting your application

ADEC Air Permits Program
610 University Avenue
Fairbanks, AK 99709- 3643

Or

FAX to (907) 451-2187

Or

Email to: DEC.AQ.Airreports@alaska.gov
(if emailed, report must be signed and certified in accordance with 18 AAC 50.345(j).)

Stationary Source Name _____

Permit Number (if known) _____ Date: _____

Emission Fee Estimate for _____
(State fiscal year)

Table 2 Total Emissions & Assessable Emission Fee Estimate

Pollutant	Asphalt Plant	Diesel Generator	Assessable Emissions
NO _x			
CO			
SO ₂			
PM-10			
VOC			

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

Printed Name

Title