Statement of Basis

Permit to Construct No. P-2013.0034
Project ID 61211

H K Contractors, Inc
Idaho Falls, Idaho

Facility ID 777-0003

Final

July 12, 2013
Robert Baldwin
Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.
ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm actual cubic feet per minute
CAA Clean Air Act
CFR Code of Federal Regulations
CI compression ignition
CO carbon monoxide
CO₂ carbon dioxide
DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency
gph gallons per hour
gpm gallons per minute
gr grains (1 lb = 7,000 grains)
HMA hot mix asphalt
hp horsepower
hr/yr hours per consecutive 12 calendar month period
ICE internal combustion engines
IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr pounds per hour
MACT Maximum Achievable Control Technology
NAAQS National Ambient Air Quality Standard
NESHAP National Emission Standards for Hazardous Air Pollutants
NO₂ nitrogen dioxide
NOₓ nitrogen oxides
NSPS New Source Performance Standards
O&M operation and maintenance
PC permit condition
PERF Portable Equipment Relocation Form
PM particulate matter
PM₂.⁵ particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM₁₀ particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD Prevention of Significant Deterioration
PTC permit to construct
PTE potential to emit
RAP recycled asphalt pavement
RFO reprocessed fuel oil
RICE reciprocating internal combustion engines
Rules Rules for the Control of Air Pollution in Idaho
SO₂ sulfur dioxide
SOₓ sulfur oxides
T/day tons per calendar day
T/hr tons per hour
T/yr tons per consecutive 12 calendar month period
ULSD ultra-low sulfur diesel
VOC volatile organic compounds
FACILITY INFORMATION

Description

HK Contractors, Inc. has proposed replacement of a drum mixer for a portable drum-mix asphalt plant. The asphalt plant consists of a counter-flow flow asphalt drum mixer equipped with a with a bag house to control particulate matter and materials transfer equipment. Materials transfer equipment at the facility will include front end loaders, feed bins, storage silos, conveyors, stock piles, and haul trucks.

Asphalt is made at the facility as follows. First, stockpiled aggregate is transferred to feed bins. The Applicant has also requested that recycled asphalt pavement (RAP) be used in the aggregate (up to 50% can be allowed). Aggregate is then dispensed from the feed bins onto feeder conveyors, which transfer the aggregate to the asphalt drum mixer. The Applicant has requested that the asphalt drum mixer be fired on natural gas, LPG/propane, #2 diesel fuel, and used oil (RFO). Next, aggregate travels through the rotating drum mixer, and when dried and heated, it is mixed with hot liquid asphaltic oil. The asphaltic oil is heated by the asphalt tank heater to allow it to flow and be mixed with the hot, dry aggregate. The resulting asphalt is conveyed to hot storage bins until it can be loaded into trucks for transport off-site or transferred to silos for temporary storage prior to transport off-site.

The Applicant has proposed a portable electrical generator will be used at the facility. Therefore, an IC engine powering the electrical generator is included in the application. The facility will be operating the asphalt plant in the same manner before the drum dryer and wet scrubber was replaced by the new drum dryer and baghouse.

Permitting History

This is the revised PTC for a facility that is replacing the asphalt drum mixer and wet scrubber with a counter-flow asphalt drum mixer and baghouse.

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

April 20, 2004 P-030507, Initial PTC for a Barber Green DM-65 HMA Plant and Caterpillar 3508B electric generator, Permit status A, but will become S upon issuance of this permit
June 28, 1999 P-019-00031 Petroleum Contaminated Soil and Aggregate Remediation
March 15, 1993 Permit No. 777-0003 Barber Greene DM-65 Portable Asphalt Plant fired exclusively on #2 fuel oil
July 18, 1979 Permit No. 13-3000-0003-00, Rotary Drum Asphalt Plant
September 16, 1977 Permit No. 9900-0003, Barber Greene Model KB-85 (Portable Plant)

Application Scope

This is a revised PTC for an existing minor facility that was constructed in April 20, 2004.

The asphalt plant will be fed a mixture of crushed fines and aggregates from imported aggregate. The process begins with materials being fed via front end loader to a compartment bin feeder system and then dispensed in metered proportions to a collecting conveyor. The material will pass over a scalping screen before being conveyed into the drum mixer via a scalping screen.

Inside the drum mixer the aggregates will be heated to specification temperature and then asphaltic oil is added. In some instances up to 50% RAP may be substituted for virgin aggregate.

The mixed asphalt is dispensed to a slat conveyor and then lifted up to a hot storage silo for intermediate storage. Trucks are then loaded by driving under the hot storage silo.
The silo loading process will be enclosed and vented back to the drum via suction induced either through the conveyor or via a separate duct line. The unloading process will be uncontrolled.

Particulate emissions will be controlled by maintaining the moisture content at 1.5% by weight for all ¼ in and smaller aggregate feed materials via water sprays. In addition, all particulate emissions from the asphalt drum mixer will be collected and vented to a high efficiency baghouse with a minimum control efficiency of 99% as proposed by the Applicant.

The Applicant has also proposed to revise the existing asphalt production rate throughput limits to 400 tons per hour, 6,400 tons per day, and 1,000,000 tons per year.

The Applicant has also proposed that a compression ignition IC engines powering electrical generator will be used to provide electricity for the facility when line power is not available.

**Application Chronology**

May 14, 2013

- DEQ received an application and an application fee.
- DEQ provided no opportunity to request a public comment period on the application and proposed permitting action because this permitting action did not results in an increase in emissions.

March 19, 2013

- DEQ received the permit processing fee. The process fee was transferred from another project in which the facility withdrew the application.

June 11, 2013

- DEQ determined that the application was complete.

June 24, 2013

- DEQ made available the draft permit and statement of basis for peer and regional office review.

June 26, 2013

- DEQ made available the draft permit and statement of basis for applicant review.

July 1, 2013

- DEQ received comments from the facility.

July 12, 2013

- DEQ issued the final permit and statement of basis.

**TECHNICAL ANALYSIS**

The asphalt production facility utilizes a baghouse for control of particulate matter emissions from the asphalt drum mixer. In addition, the Applicant will maintain the moisture content in ¼” or smaller aggregate material at 1.5% by weight, using water sprays, using shrouds, or will use other emissions controls to minimize PM₁₀ emissions from aggregate handling.
### Emissions Units and Control Equipment

Table 1  EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

<table>
<thead>
<tr>
<th>Source ID No.</th>
<th>Sources</th>
<th>Control Equipment</th>
<th>Emission Point ID No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Mix Asphalt Drum Mixer</td>
<td><strong>Asphalt Drum Mixer:</strong> Manufacturer: Astec Model: 400T Type: Counter-flow/Parallel-flow Manufacture Date: 2000 Max. production: 400 T/hr, 6,400 T/day, and 1,000,000 T/yr Fuel(s): Natural gas, LPG/propane, #2 fuel oil, and used oil Sulfur content: 0.0015% by weight Fuel consumption: XXX gal/hr</td>
<td><strong>Asphalt Drum Mixer Baghouse:</strong> Manufacturer: Astec Model: PBH67 Type: Reverse pulse-jet Flow rate: 67,000 dscf PM10 control efficiency: 99%</td>
<td>Exit height: 23.25 ft (7.09 m) Exit diameter: 4.0 ft (1.22 m) Exit flow rate: 67,000 acfm Exit temperature: 280 °F (137.8 °C)</td>
</tr>
<tr>
<td>Primary IC Engine</td>
<td><strong>Primary IC Engine:</strong> Manufacturer: Caterpillar Model: 3508B Manufacture Date: Before 2004 Max. power rating: 610 bhp Fuel: ULSD diesel Sulfur content: 0.0015% by weight Fuel consumption: 52.5 gal/hr Annual use limit: 2,786 hrs/yr</td>
<td>N/A</td>
<td>Exit height: 13.5 ft (4.1148 m) Exit diameter: 0.67 ft (0.2042 m) Exit flow rate: 18,223 acfm (92.6 m/s) Exit temperature: 68 °F (20 °C)</td>
</tr>
<tr>
<td>Materials Handling</td>
<td><strong>Material Transfer Points:</strong> Materials handling Asphalt aggregate transfers Truck unloading of aggregate Aggregate conveyor transfers Aggregate handling</td>
<td><strong>Water sprays (or equivalent)</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>
Emissions Inventories

This project consist of replacing a 500 T/hr asphalt drum dryer permitted at 430 T/hr average production rate to 400 T/hr asphalt drum dryer permitted at 400 T/hr average production rate. This is a reduction in the emissions for the production from the asphalt drum dryer. The emissions from the previously permitted drum dryer were controlled by a wet scrubber while the replacement drum dryer emissions are controlled by a baghouse. The baghouse has a higher efficiency of capture thus will result in additional reduction of emissions from the previous operation. The revised asphalt plant is permitted to use the same fuels as the previous plant. Overall the emissions from the revised asphalt plant operation are reduced. The asphalt plant will be operated in the same manner the asphalt plant was before the revision.

The same Caterpillar engine will be used to provide electrical power for the asphalt plant with the new asphalt drum dryer with the baghouse.

The revised permit has the same limitations on the asphalt average production rate and engine operating limitations when collocated with one other facility. The specific facility types are described in the permit. The previous permit allowed collocation under certain circumstances but at a throughput limits of half the asphalt average production rate and with a day limit and total hours per year limit placed on the engine operation while collocated.

Potential to Emit

IDAPA 58.01.01 defines Potential to Emit as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air 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 state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source.

Using this definition of Potential to Emit an emission inventory was developed for the asphalt production operations at the facility associated with this proposed project using the DEQ developed HMA EI spreadsheet (see Appendix A). Emissions estimates of criteria pollutant PTE were based on the following assumptions:

- Maximum asphalt throughput does not exceed 400 ton HMA/hour, 6,400 ton HMA/day, and 1,000,000 ton HMA/year (per the Applicant).
- Emissions from the asphalt drum dryer were based on the maximum emissions from using any of the proposed fuels for combustion in the drum dryer.
- Emissions from a portable rock crusher were included in the prior permit with the assumption that when the collocated rock crusher is operating, the asphalt plant is operating at half its maximum capacity.
- The primary IC engine powering a generator has a maximum brake-horsepower rating of less or equal to 610 bhp, and proposed operation of up to 24 hour/day and 2786 hour/year (per the prior permit). When collocated 19 hr/day and 1393 hours/year (per prior permit).

Uncontrolled Potential to Emit

Using the definition of Potential to Emit, uncontrolled Potential to Emit is then defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air 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 not be treated as part of its design since the limitation or the effect it would have on emissions is not state or federally enforceable.

The uncontrolled Potential to Emit is used to determine if a facility is a “Synthetic Minor” source of emissions. Synthetic Minor sources are facilities that have an uncontrolled Potential to Emit for regulated air pollutants or HAP above the applicable Major Source threshold without permit limits.
The following table presents the post project uncontrolled emissions for regulated air pollutants as submitted by the Applicant and verified by DEQ staff. Uncontrolled emissions were determined as follows:

- For the asphalt drum mixer controlled and uncontrolled emissions were assumed to be equal.

See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T/yr</td>
<td>T/yr</td>
<td>T/yr</td>
<td>T/yr</td>
<td>T/yr</td>
</tr>
<tr>
<td>Asphalt drum mixer</td>
<td>11.5</td>
<td>5.5</td>
<td>27.5</td>
<td>65</td>
<td>16</td>
</tr>
<tr>
<td>Primary IC engine</td>
<td>2.48</td>
<td>0.006</td>
<td>35.2</td>
<td>7.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Total, Point Sources</td>
<td>13.98</td>
<td>5.51</td>
<td>62.70</td>
<td>72.6</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Pre-Project Potential to Emit

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

The following table presents the pre-project potential to emit for all criteria pollutants from for the one unit being revised as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 3 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM$<em>{10}$/PM$</em>{2.5}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr$^{(a)}$</td>
<td>T/yr$^{(b)}$</td>
<td>lb/hr$^{(a)}$</td>
<td>T/yr$^{(b)}$</td>
<td>lb/hr$^{(a)}$</td>
</tr>
<tr>
<td>Asphalt drum mixer</td>
<td>11.5</td>
<td>16</td>
<td>5.5</td>
<td>7.7</td>
<td>27.5</td>
</tr>
<tr>
<td>Primary IC engine</td>
<td>1.78</td>
<td>2.48</td>
<td>0.005</td>
<td>0.006</td>
<td>25.3</td>
</tr>
<tr>
<td>Pre-Project Totals</td>
<td>13.28</td>
<td>18.48</td>
<td>5.51</td>
<td>7.7</td>
<td>52.80</td>
</tr>
</tbody>
</table>

a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.
b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

Post Project Potential to Emit

The following table presents the post project Potential to Emit for criteria pollutants from revised emissions units at the facility as determined by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 4 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr$^{(a)}$</td>
<td>T/yr$^{(b)}$</td>
<td>lb/hr$^{(a)}$</td>
<td>T/yr$^{(b)}$</td>
<td>lb/hr$^{(a)}$</td>
</tr>
<tr>
<td>Asphalt drum mixer</td>
<td>9.2</td>
<td>11.5</td>
<td>4.4</td>
<td>5.5</td>
<td>22</td>
</tr>
<tr>
<td>Primary IC engine</td>
<td>1.78</td>
<td>2.48</td>
<td>0.005</td>
<td>0.006</td>
<td>25.3</td>
</tr>
<tr>
<td>Post Project Totals</td>
<td>10.98</td>
<td>13.98</td>
<td>4.41</td>
<td>5.51</td>
<td>47.30</td>
</tr>
</tbody>
</table>

a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.
b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

As demonstrated in Tables 2 and 3, this facility has uncontrolled potential to emit for NO$_x$ emissions are not greater than the Major Source threshold of 100 T/yr and a controlled potential to emit for PM$_{10}$, SO$_2$, NO$_x$, CO, and VOC emissions less than the Major Source threshold of 100 T/yr. Therefore, this facility is designated as a Synthetic Minor facility. As demonstrated in Table 4 the facility’s PTE for all criteria pollutants is less than 80% of the Major Source thresholds of 100 T/yr. Therefore, this facility will not be designated as a SM-80 facility.

Change in Potential to Emit

The change in facility-wide potential to emit is used to determine if a public comment period may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants.
<table>
<thead>
<tr>
<th>Emissions</th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr</td>
<td>lb/hr</td>
<td>lb/hr</td>
<td>lb/hr</td>
<td>lb/hr</td>
</tr>
<tr>
<td>Pre-Project Potential to Emit</td>
<td>13.28</td>
<td>18.48</td>
<td>5.51</td>
<td>7.7</td>
<td>52.8</td>
</tr>
<tr>
<td>Post Project Potential to Emit</td>
<td>10.98</td>
<td>13.98</td>
<td>4.41</td>
<td>5.5</td>
<td>47.3</td>
</tr>
<tr>
<td>Changes in Potential to Emit</td>
<td>-2.3</td>
<td>-4.5</td>
<td>-1.1</td>
<td>-2.19</td>
<td>-5.5</td>
</tr>
</tbody>
</table>

The minus sign indicates the new potential to emit of the revised asphalt plant is less than the original asphalt plant while the numerical value indicates the amount of emissions reduction of the revised asphalt facility for the regulated criteria pollutants.
REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The previous modeling analysis for this facility demonstrates compliance with applicable standards in attainment areas. However, because a separate modeling analysis was not provided to demonstrate compliance with applicable standards in non-attainment areas, this portable facility is not permitted for operation in non-attainment areas. This requirement is assured by Permit Condition 7.

Facility Classification

"Synthetic Minor" classification for criteria pollutants is defined as the uncontrolled Potential to Emit for criteria pollutants are above the applicable major source thresholds and the Potential to Emit for criteria pollutants fall below the applicable major source thresholds. Therefore, the following table compares the uncontrolled Potential to Emit and the Potential to Emit for criteria pollutants to the Major Source thresholds to determine if the facility will be "Synthetic Minor."

Table 3 UNCONTROLLED PTE AND PTE FOR REGULATED AIR POLLUTANTS COMPARED TO THE MAJOR SOURCE THRESHOLDS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Uncontrolled PTE (T/yr)</th>
<th>PTE (T/yr)</th>
<th>Major Source Thresholds (T/yr)</th>
<th>Uncontrolled PTE Exceeds the Major Source Threshold and PTE Exceeds the Major Source Threshold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>13.98</td>
<td>13.98</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>5.51</td>
<td>5.51</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>62.7</td>
<td>62.7</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>72.6</td>
<td>72.6</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>18.9</td>
<td>18.9</td>
<td>100</td>
<td>No</td>
</tr>
</tbody>
</table>

The facility has an uncontrolled potential to emit for PM$_{10}$, PM$_{2.5}$, SO$_2$, NO$_x$, CO, and VOC emissions are less than the Major Source thresholds of 100 T/yr for each pollutant. In addition, the facility has uncontrolled potential. Since the revised asphalt plant has the potential of combusting less fuel and producing less asphalt the HAPs emissions for this revision is less than before the revision. HAP emissions of less than the Major Source threshold of 10 T/yr and for all HAP combined less than the Major Source threshold of 25 T/yr. Therefore, this facility is not designated as a Synthetic Minor facility.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the revision of an existing permit for the replacement of the asphalt drum mixer with a wet scrubber for an asphalt drum mixer with a baghouse. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Visible Emissions (IDAPA 58.01.01.625)

IDAPA 58.01.01.625 Visible Emissions

2013.0034 PROJ 61211
The sources of PM_{10} emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 17 and 40.

**Fugitive Emissions (IDAPA 58.01.01.650)**

IDAPA 58.01.01.650 Rules for the Control of Fugitive Emissions

The sources of fugitive emissions at this facility are subject to the State of Idaho fugitive emissions standards. These requirements are assured by Permit Conditions 3, 4, and 9.

**Rules for Control of Odors (IDAPA 58.01.01.775)**

IDAPA 58.01.01.750 Rules for Control of Odors

Section 776.01 states that no person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution. These requirements are assured by Permit Conditions 8 and 11.

**Rules for Control of Hot-Mix Asphalt Plants (IDAPA 58.01.01.805)**

IDAPA 58.01.01.805 Rules for Control of Hot-Mix Asphalt Plants

The purpose of Sections 805 through 808 is to establish for hot-mix asphalt plants restrictions on the emission of particulate matter.

Section 806 states that no person shall cause, allow or permit a hot-mix asphalt plant to have particulate emissions which exceed the limits specified in Sections 700 through 703. This has been demonstrated through performance testing and the emission limits set on the operation of the asphalt plant.

Section 807 states that in the case of more than one stack to a hot-mix asphalt plant, the emission limitation will be based on the total emission from all stacks. The proposed facility only has one stack for emissions from the asphalt drum dryer so there is no need to combine emissions limits from multiple stacks into one stack as required.

Section 808.01 requires fugitive emission controls as follows: No person shall cause, allow or permit a plant to operate that is not equipped with an efficient fugitive dust control system. The system shall be operated and maintained in such a manner as to satisfactorily control the emission of particulate material from any point other than the stack outlet.

Section 808.02 requires plant property dust controls as follows: The owner or operator of the plant shall maintain fugitive dust control of the plant premises and plant owned, leased or controlled access roads by paving, oil treatment or other suitable measures. Good operating practices, including water spraying or other suitable measures, shall be employed to prevent dust generation and atmospheric entrainment during operations such as stockpiling, screen changing and general maintenance.

These requirements are assured by Permit Conditions 3 and 4.

**Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)**

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for PM_{10}, SO_{2}, NO_{X}, CO, and VOC or 10 tons per year for any one HAP or 25 tons per year for all HAP combined HAPs as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.
Table 4  PTE FOR REGULATED AIR POLLUTANTS COMPARED TO THE MAJOR SOURCE THRESHOLDS

<table>
<thead>
<tr>
<th>Regulated Air Pollutants</th>
<th>PTE (T/yr)</th>
<th>Major Source Threshold (T/yr)</th>
<th>Exceeds the Major Source Threshold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>13.98</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>5.51</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>62.7</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>72.6</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>18.9</td>
<td>100</td>
<td>No</td>
</tr>
</tbody>
</table>

As presented in the preceding table the PTE for each criteria pollutant is less than 100 T/yr. Therefore, this facility is not a criteria pollutant Major Source subject to Tier I requirements.

**PSD Classification (40 CFR 52.21)**

40 CFR 52.21  Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

**NSPS Applicability (40 CFR 60)**

Because the facility produces asphalt and has a compression ignition IC engine the following NSPS Subparts are applicable:

- 40 CFR 60, Subpart I - National Standards of Performance for Hot Mix Asphalt Plants

**40 CFR 60, Subpart I National Standards of Performance for Hot Mix Asphalt Plants**

This permitting action is for a new asphalt plant. Therefore, the requirements of this subpart may apply.

§ 60.90  Applicability and designation of affected facility

In accordance with §60.90(a), each hot mix asphalt facility is an affected facility. In accordance with §60.90(b), any hot mix asphalt facility that commences construction or modification after June 11, 1973 is subject to the requirements of Subpart I.

The affected facility includes: the dryer; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.

§ 60.91  Definitions

This section contains the definitions of this subpart.

§ 60.92  Standard for particulate matter

In accordance with §60.92, no owner or operator shall discharge or cause the discharge into the atmosphere from any affected facility any gases which contain particulate matter in excess of 0.04 gr/dscf or exhibit 20% opacity or greater. Permit Condition 24 includes the requirements of this section.

§ 60.93  Test methods and procedures
In accordance with §60.93(a), performance tests shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60.

In accordance with §60.93(b), compliance with the particulate matter standards shall be determined by EPA Reference Method 5, and opacity shall be determined by EPA Reference Method 9. Permit Conditions 25 and 26 includes the requirements of this section.

**NESHAP Applicability (40 CFR 61)**

The facility is not subject to any NESHAP requirements in 40 CFR 61.

**MACT Applicability (40 CFR 63)**

Because the facility has a compression ignition IC engine the following NESHAP Subpart may be applicable:


§ 63.6580  
What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. As demonstrated previously in the Emissions Inventories Section of this analysis this facility is an area source for HAPs as the potential to emit for HAPs is 0.72 T/yr. Therefore, the engines at this facility may be subject to the requirements of Subpart ZZZZ.

§ 63.6585  
What is the purpose of subpart ZZZZ?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

§ 63.6590  
What parts of my plant does this subpart cover?

This subpart applies to each affected source.

Section (a) defines an affected source as any **existing**, **new**, or **reconstructed stationary** RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

Sections (1)(i) through (1)(iv) defines **existing** stationary RICE as the following:
For stationary RICE with a site rating of more than 500 brake horsepower (bhp) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

For stationary RICE with a site rating of less than or equal to 500 brake bhp located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

Sections (2)(i) through (2)(iii) defines new stationary RICE as the following:

A stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

A stationary RICE with a site rating of equal to or less than 500 bhp located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

Section (3)(i) through (2)(iii) defines reconstructed stationary RICE as the following:

A stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

A stationary RICE with a site rating of equal to or less than 500 bhp located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

Section (b) specifies which stationary RICE are subject to limited requirements of this subpart. An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f). The requirements of (b)(1)(i) through (ii) are as follows:

The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions.

The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions.

Section (2) specifies that a new or reconstructed stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10% or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

Section (3) allows that the following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

Existing spark ignition 2-stroke lean-burn (2SLB) stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing spark ignition 4-stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;
Existing emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing limited use stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10% or more of the gross heat input on an annual basis;

Existing residential emergency stationary RICE located at an area source of HAP emissions;

Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

Existing institutional emergency stationary RICE located at an area source of HAP emissions.

As presented previously in the Emissions Units and Control Devices Section previously, the IC engine at this facility are compression ignition stationary RICE. The Primary IC Engine has a site rating of more than 500 bhp and is located at an area of HAP emissions (see the Emissions Inventories Section). Therefore, the Primary IC Engine is subject to the requirements of Subpart ZZZZ.

§ 63.6595 When do I have to comply with this subpart?

a) Affected sources. (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

These engine is a existing stationary SI RICE located at an area source of HAP emissions. Therefore, the Primary IC Engine has until May 3, 2013 to comply with the requirements of this subpart. Permit Condition 42 includes the requirement of this section.

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and compression ignition stationary RICE located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions;
existing compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

<table>
<thead>
<tr>
<th>For Each</th>
<th>You Must Meet the Following Operating Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst</td>
<td>Comply with any operating limitations approved by the Administrator.</td>
</tr>
</tbody>
</table>

As stated in §63.6603 and §63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

<table>
<thead>
<tr>
<th>For Each</th>
<th>You Must Meet the Following Operating Limitation</th>
<th>During periods of startup you must ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-Emergency, non-black start CI stationary RICE ≤300 HP</td>
<td>a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;¹</td>
<td>Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.</td>
</tr>
<tr>
<td></td>
<td>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>2. Non-Emergency, non-black start CI stationary RICE &lt;300 HP ≤500 HP</td>
<td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O₂; or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Reduce CO emissions by 70 percent or more.</td>
<td></td>
</tr>
<tr>
<td>3. Non-Emergency, non-black start CI stationary RICE &gt;500 HP</td>
<td>a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O₂; or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Reduce CO emissions by 70 percent or more.</td>
<td></td>
</tr>
</tbody>
</table>

¹ Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

² If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

Permit Conditions 43, 44, 45, 46, and 47 includes the requirements of this section.

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for non-road diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

Permit Condition 57 includes the requirements of this section.

§ 63.6605 What are my general requirements for complying with this subpart?
(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

This is a general permit requirement which is included in the Permit to Construct General Provisions – General Compliance.

§ 63.6612

By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

1. The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

2. The test must not be older than 2 years.

3. The test must be reviewed and accepted by the Administrator.

4. Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

As stated in §§63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:
<table>
<thead>
<tr>
<th>For Each...</th>
<th>Complying with the requirement to...</th>
<th>You must...</th>
<th>Using...</th>
<th>According to the following requirements...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2SLB, 4SLB, and CI stationary RICE</td>
<td>a. Reduce CO emissions</td>
<td>i. Measure the O₂ at the inlet and outlet of the control device; and</td>
<td>(1) Portable CO and O₂ analyzer</td>
<td>(a) Using ASTM D6522–00 (2005) (incorporated by reference, see §63.14). Measurements to determine O₂ must be made at the same time as the measurements for CO concentration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Measure the CO at the inlet and the outlet of the control device</td>
<td>(1) Portable CO and O₂ analyzer</td>
<td>(a) Using ASTM D6522–00 (2005) (incorporated by reference, see §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O₂, dry basis.</td>
</tr>
<tr>
<td></td>
<td>3. Stationary RICE</td>
<td>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust</td>
<td>i. Select the sampling port location and the number of traverse points; and</td>
<td>(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii. Determine the O₂ concentration of the stationary RICE exhaust at the sampling port location; and</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and</td>
<td>(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iv. Measure formaldehyde at the exhaust of the stationary RICE; or</td>
<td>(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03, provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>v. Measure CO at the exhaust of the stationary RICE</td>
<td>(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00 (2005), Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03</td>
</tr>
</tbody>
</table>

You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.

You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

Permit Conditions 48, 49, and 50 includes the requirements of this section.

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.
<table>
<thead>
<tr>
<th>For Each</th>
<th>You Must Meet the Following Operating Limitation</th>
<th>During periods of startup you must ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower &gt;500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower &gt;500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE</td>
<td>Limit or reduce CO or formaldehyde emissions</td>
<td>Conduct subsequent performance tests every 8760 hrs. or 3 years, whichever comes first.</td>
</tr>
</tbody>
</table>

Permit Condition 49 includes the requirements of this section.

§ 63.6620  What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

\[
[(C_1 - C_o) + C_1] \times 100 = R \text{ (Eq. 1)}
\]

Where:

- \( C_1 \) = concentration of CO or formaldehyde at the control device inlet,
- \( C_o \) = concentration of CO or formaldehyde at the control device outlet, and
- \( R \) = percent reduction of CO or formaldehyde emissions.

(ii) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific \( F_o \) value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

\[
F_o = (0.209 \times F_d) + F_c \text{ (Eq. 2)}
\]

Where:

- \( F_o \) = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.
- 0.209 = Fraction of air that is oxygen, percent/100.
- \( F_d \) = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3 /J (dscf/106 Btu).
- \( F_c \) = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm3 /J (dscf/106 Btu).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:
\[ X_{\text{CO}_2} - 5.9 \div F_o \text{ (Eq. 3)} \]

Where:

\[ X_{\text{CO}_2} = \text{CO}_2 \text{ correction factor, percent.} \]

\[ 5.9 = 20.9 \text{ percent } \text{O}_2 - 15 \text{ percent } \text{O}_3, \text{ the defined } \text{O}_2 \text{ correction value, percent.} \]

(iii) Calculate the NO\(_X\) and SO\(_2\) gas concentrations adjusted to 15 percent O\(_2\) using CO\(_2\) as follows:

\[ C_{\text{adj}} = C_d \times (X_{\text{CO}_2} + %\text{CO}_2 \text{ (Eq. 4)} \]

Where:

\[ %\text{CO}_2 = \text{Measured } \text{CO}_2 \text{ concentration measured, dry basis, percent.} \]

Permit Condition 48 includes the requirements of this section.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

Permit Condition 49 and 50 include the requirements of this section.

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) of this section.

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

Permit Condition 51 includes the requirements of this section.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

As discussed previously Permit Conditions 50 and 51 includes the requirements of this section.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

Permit Condition 51 includes the requirements of this section.
§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.
<table>
<thead>
<tr>
<th>For Each</th>
<th>Complying with the requirement to...</th>
<th>You have demonstrated initial compliance if...</th>
</tr>
</thead>
</table>
| **1.** New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Reduce CO emissions and using oxidation catalyst, and using a CPMS | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and  
ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and  
iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| **2.** Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  
ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and  
iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| **3.** New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Reduce CO emissions and not using oxidation catalyst | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and  
ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and  
iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| **4.** Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year | a. Limit the concentration of CO, and not using oxidation catalyst | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  
ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and  
iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE >250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year

   a. Reduce CO emissions, and using a CEMS

6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year

   a. Limit the concentration of CO, and using a CEMS

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).
(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combuts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) Requirements for emergency stationary RICE. (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Permit Condition 52 includes the requirements of this section.

§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

Permit Condition 52 includes the requirements of this section.

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

Permit Condition 49 includes the requirements of this section.
(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

Permit Condition 61 includes the requirements of this section.

§ 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.
(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semianual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semianual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semianual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

As stated in §63.6650, you must comply with the following requirements for reports:

<table>
<thead>
<tr>
<th>For Each...</th>
<th>You must submit a...</th>
<th>The report must contain...</th>
<th>You must submit the report...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existing non-emergency, non-black start stationary RICE 100&lt;HP&lt;500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP and operated more than 24 hours per calendar year; new or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250&lt;HP&lt;500 located at a major source of HAP</td>
<td>Compliance report</td>
<td>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</td>
<td>i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(c); or</td>
<td>ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4)</td>
<td>i. Semiannually according to the requirements in §63.6650(b).</td>
</tr>
</tbody>
</table>

Permit Condition 53 includes the requirements of this section.
§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xii).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICB.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

Permit Condition 53, 56, 57, and 58 includes the requirements of this section.
§ 63.6660 In what form and how long must I keep my records?
(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

Permit Condition 53 includes the requirements of this section.

§ 63.6665 What parts of the General Provisions apply to me?
Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

Permit Condition 55 includes the requirements of this section.

Permit Conditions Review
This section describes the permit conditions for this initial permit or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Permit condition 1 establishes the permit to construct scope.

Permit condition 2 provides a description of the purpose of the permit and the regulated sources, the process, and the control devices used at the facility.

FACILITY-WIDE CONDITIONS
As discussed previously, permit condition 3 establishes that the permittee shall take all reasonable precautions to prevent fugitive particulate matter (PM) from becoming airborne and provides examples of the controls in accordance with IDAPA 58.01.01.650-651.

As discussed previously, permit condition 4 establishes that the asphalt plant shall employ efficient fugitive dust controls and provides examples of the controls in accordance with IDAPA 58.01.01.808.01 and 808.02.

Permit condition 5 establishes the collocation restrictions regarding what the type of another facility and if the facility is located within an attainment or nonattainment area.

Permit condition 6 establishes that the permittee notify DEQ when the permitted portable equipment is relocated. This requirement is based upon imposing reasonable permit conditions for portable asphalt plants.

Permit condition 8 establishes that there are to be no emissions of odorous gases, liquids, or solids from the permit equipment into the atmosphere in such quantities that cause air pollution.
As discussed previously, permit condition 9 establishes that the permittee shall monitor fugitive dust emissions on a daily basis to demonstrate compliance with other permit requirements.

Permit Condition 10 establishes the recordkeeping requirements if another facility is collocated with the HMA.

Permit condition 11 establishes that the permittee monitor and record odor complaints to demonstrate compliance with other permit requirements.

Permit Condition 12 establishes that the permittee shall maintain records as required by the Recordkeeping General Provision.

**ASPHALT PRODUCTION EQUIPMENT**

Permit condition 13 provides a process description of the asphalt production process at this facility.

Permit condition 14 provides a description of the control devices used on the asphalt production equipment at this facility.

Permit condition 15 establishes hourly and annual emissions limits for PM\textsubscript{10}, SO\textsubscript{2}, NO\textsubscript{X}, CO, and VOC emissions from the asphalt production operation at this facility.

As discussed previously permit condition 16 incorporates the particulate matter and opacity standards of 40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Plants.

As discussed previously, Permit Condition 17 establishes a 20% opacity limit for the asphalt drum mixer baghouse stack, the asphaltic oil tank heater stack, the load-out station stack(s), and the silo filling slat conveyor stacks or functionally equivalent openings associated with the asphalt production operation.

Permit Condition 18 establishes an hourly, a daily, and an annual asphalt production limit for the asphalt production operation as proposed by the Applicant.

Permit Condition 19 establishes a reduced daily asphalt production limit for the asphalt production operation when operated on days when a collocated portable rock crusher is operated. This requirement was based upon the air quality modeling analysis performed for this application.

Permit Condition 20 establishes limits for the raw materials used in the asphalt production operation as proposed by the Applicant.

Permit Condition 21 establishes that a baghouse be used to control emissions from the asphalt drum mixer as proposed by the Applicant.

Permit Condition 22 establishes fuel use restrictions for combustion in the asphalt drum mixer based upon 40 CFR 279.11. These fuel use restrictions were based on the fuels proposed by the Applicant to be combusted in the asphalt drum mixer.

Permit Condition 23 establishes PM testing methods and procedures as required by 40 CFR 60, Subpart I for Hot Mix Asphalt Plants.

Permit Condition 24 establishes PM\textsubscript{10} performance testing requirements required by DEQ on asphalt plants located in the state of Idaho.

Permit Condition 25 establishes PM\textsubscript{10} performance testing methods and procedures required by DEQ on asphalt plants located in the state of Idaho.

Permit condition 26 establishes that the permittee monitor asphalt production, visible emissions, RAP percentage usage, and the fuel combusted in the asphalt drum mixer during the performance tests to establish the validity of the performance tests.

Permit condition 27 establishes that the Permittee monitor and record hourly and daily asphalt production to demonstrate compliance with the Asphalt Production Limits permit condition.

Permit condition 28 establishes that the Permittee calculate and record RAP use to demonstrate compliance with the Allowable Raw Materials permit condition.
Permit condition 29 establishes that the Permittee shall establish procedures for operating the baghouse. This is a DEQ imposed standard requirement for operations using baghouses to control particulate emissions.

Permit condition 30 establishes that the permittee monitor distillate fuel oil shipments to demonstrate compliance with other permit requirements.

Permit condition 31 establishes that the permittee monitor used oil fuel shipments to demonstrate compliance with the used oil fuel requirements of the permit.

Permit Condition 32 establishes that the permittee shall maintain records as required by the Recordkeeping General Provision.

Permit Condition 33 establishes that the permittee shall submit the results of the performance tests to the appropriate DEQ office.

Permit condition 34 establishes that the federal requirements of 40 CFR Part 60, Subpart I – Standards of Performance for Hot Mix Asphalt Plants, are incorporated by reference into the requirements of this permit per current DEQ guidance.


**INTERNAL COMBUSTION ENGINES**

Permit condition 36 provides a process description of the IC engines process at this facility.

Permit condition 37 provides a description of the control devices used on the IC engines at this facility.

Permit condition 38 establishes hourly and annual emissions limits for PM_{10}, SO_{2}, NO_{x}, CO, and VOC emissions from the IC engines at this facility.

As discussed previously, Permit Condition 39 establishes a 20% opacity limit for the Primary IC Engine exhaust stack or functionally equivalent openings associated with the asphalt production operation.

Permit Condition 40 establishes a daily and an annual operation limit for the Primary IC Engine as proposed by the Applicant.

Permit Condition 41 establishes fuel use restrictions for combustion in the Primary IC Engine. These fuel use restrictions were based on the fuel proposed by the Applicant to be combusted in the Primary IC Engine.

As discussed previously, Permit Condition 42 establishes the initial compliance date for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 43 establishes startup requirements for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 44 establishes CO emissions measuring procedures for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 45 establishes O_{2} and CO emissions measuring procedures for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 46 establishes formaldehyde or CO emissions concentration measurement requirements for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 47 establishes performance testing requirements for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 48 establishes performance emissions reductions determination requirements for the Primary IC Engine as required by 40 CFR 63, Subpart YYYY for Stationary Reciprocating Internal Combustion Engines.
As discussed previously, Permit Condition 49 establishes performance tests administrator petition requirements for the Primary IC Engine as required by 40 CFR 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.

As discussed previously, Permit Condition 50 requires the installation of a Continuous Parameter Monitoring System (CPMS) for the Primary IC Engine as required by 40 CFR 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.

Permit condition 51 establishes the requirements for the installation of either a closed crankcase ventilation system or an open crankcase filtration emission control system.

Permit condition 52 establishes the notification requirements regarding the requirements of 40 CFR 63, ZZZZ.

As discussed previously, Permit Condition 53 establishes compliance recordkeeping requirements for the Primary IC Engine as required by 40 CFR 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.

Permit condition 54 establishes that the federal requirements of 40 CFR Part 63, Subpart ZZZZ - National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines are incorporated by reference into the requirements of this permit per current DEQ guidance.


Permit condition 56 establishes that the permittee monitor and record daily operation of the Primary IC Engine to demonstrate compliance with the Primary IC Engine Operating Limits permit condition.

Permit condition 57 establishes that the permittee monitor distillate fuel oil shipments to demonstrate compliance with the distillate fuel oil requirements of the permit.

Permit Condition 58 establishes that the permittee shall maintain records as required by the Recordkeeping General Provision.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04 or IDAPA 58.01.01.404.04.
The emissions inventory was stated within the Statement of Basis.
APPENDIX B – AMBIENT AIR QUALITY IMPACT ANALYSES
No modeling was performed because the project did not have an emissions increase.
The following comments were received from the facility on July 1, 2013:

**Facility Comment:** Draft date should be 2013.

**DEQ Response:** The draft date was change to 2013.

**Facility Comment:** The draft permit indicates 400 tons/hour, 6,400 tons/day and 1,000,000 tons/year, if the stack test is passed at 450 tons/hour will a request to revise the permit be needed or will you (IDEC) make the change when IDEC receives a copy of the stack test and its results?

**DEQ Response:** If a performance test was performed that indicated the production of asphalt could reach an output of 450 tons/hour and also stay within the required emission limits (asphalt production emission limits, grain loading standard of 40 CFR 60 subpart I, and opacity limit) the facility would be required to revise the permit to meet the higher production capacity. The 400 ton/hour limit of this permit was the application's maximum hourly output of asphalt production.

**Facility Comment:** The 40 CFR 63, ZZZZ for Stationary Reciprocating Internal Combustion Engines – Correct me if I am wrong – If the Generator moves 1 time or more per year then the RICE rules do not apply?

**DEQ Response:** According to 40 CFR part 1068 .30 What definitions apply to this part?

*Exempted* means relating to engines/equipment that are not required to meet otherwise applicable standards. Exempted engines/equipment must conform to regulatory conditions specified for an exemption in this part 1068 or in the standard-setting part. Exempted engines/equipment are deemed to be “subject to” the standards of the standard-setting part even though they are not required to comply with the otherwise applicable requirements. Engines/equipment exempted with respect to a certain tier of standards may be required to comply with an earlier tier of standards as a condition of the exemption; for example, engines exempted with respect to Tier 3 standards may be required to comply with Tier 1 or Tier 2 standards.

**Nonroad engine means:**

(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, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)).

(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. See § 1068.31 for provisions that apply if the engine is removed from the location.

**Conclusion:** If the engine described in this permit were to be moved at least once from a location within a 12 consecutive month period it would appear the engine is a non-road engine and not a stationary engine subject to 40 CFR 63 subpart ZZZZ. DEQ does provide Portable Equipment Relocation Forms on its website [www.deq.idaho.gov](http://www.deq.idaho.gov) that are to be filled out and submitted to DEQ whenever a portable facility is relocated. These forms also are used to determine compliance with the movement of the engine to assist if the engine is in fact exempt from 40 CFR 63 subpart ZZZZ.
APPENDIX D – PROCESSING FEE
The process fee of $500 was transferred from a previously withdrawn project application of HK Contractors Inc.