



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

February 6, 2013

Teresa Perkins, Director, Environmental and Sustainability Division  
U.S. Department of Energy  
1955 North Fremont Avenue  
Idaho Falls, ID 83401

RE: Facility ID No. 023-00001, 011-00022, U.S. Department of Energy, Idaho National Laboratory,  
Idaho Falls  
Final Tier I Operating Permit Letter

Dear Ms. Perkins:

The Department of Environmental Quality (DEQ) is issuing Tier I Operating Permit No. TI-2009.0148 to U.S. Department of Energy, Idaho National Laboratory at Idaho Falls in accordance with IDAPA 58.01.01.300 through 386, Rules for the Control of Air Pollution in Idaho (Rules).

The enclosed permit is effective immediately, summarizes the applicable requirements for your facility, and requires an annual compliance certification for all emissions units. This permit replaces Tier I Operating Permit No. T1-2009.0114, issued October 30, 2009. The enclosed operating permit is based on the information contained in your permit application received on December 23, 2009; and the additional information that was received from INL on December 17, 2010; July 20, 2012; September 26, 2012; and November 1, 2012. Modifications to and/or renewal of this operating permit shall be requested in a timely manner in accordance with the Rules.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Maria Miles, Air Quality Compliance Officer, at 208-528-2650 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Harbi Elshafei at 208 373-0502 or [harbi.elshafei@deq.idaho.gov](mailto:harbi.elshafei@deq.idaho.gov) to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Simon".

Mike Simon  
Stationary Source Program Manager  
Air Quality Division

MS/HE Permit No. T1-2009.0148

Enclosure

# AIR QUALITY

## TIER I OPERATING PERMIT

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**Permittee** U.S. Department of Energy – Idaho Operations Office  
**Permit Number** T1-2009.0148  
**Facility ID** 023-00001, 011-00022  
**Facility Location** Scoville, Idaho. Hwy. 20/26 between Arco and Idaho Falls, and Hwy. 33 between Mud Lake and Arco  
Scoville, ID 83401

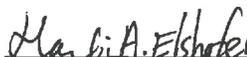
### Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules) (IDAPA 58.01.01.300–386) (b) incorporates all applicable terms and conditions of prior air quality permits issued by the Idaho Department of Environmental Quality (DEQ) for the permitted source, unless the permittee emits toxic pollutants subject to state-only requirements pursuant to IDAPA 58.01.01.210 and the permittee elects not to incorporate those terms and conditions into this operating permit.

The permittee shall comply with the terms and conditions of this permit. The effective date of this permit is the date of signature by DEQ on this cover page.

**Date Issued** February 06, 2013

**Date Expires** February 06, 2018

  
Harbi A Elshafei, Permit Writer

  
Mike Simon, Stationary Source Manager

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## Acronyms, Units, and Chemical Nomenclature

|             |  |
|-------------|--|
| AMWTF       | Advanced Mixed Waste Treatment Facility  |
| AMWTP       | Advanced Mixed Waste Treatment Project   |
| AP-42       | Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources |
| AQCR        | Air Quality Control Region   |
| ASTM        | American Society for Testing and Materials   |
| ATR-Complex | Advanced Test Reactor-Complex  |
| Btu         | British thermal unit   |
| Btu/hr      | British thermal unit per hour  |
| °C          | degree centigrade  |
| CAA         | Clean Air Act  |
| CFA         | Central Facilities Area  |
| CFR         | Code of Federal Regulations  |
| CI          | Compression Ignition   |
| CO          | carbon monoxide  |
| CITRC       | Critical Infrastructure Test Range Complex   |
| CPP         | Chemical Processing Plant (now known as INTEC)   |
| CRR         | Carbon Reduction Reformer  |
| DEQ         | Department of Environmental Quality  |
| DMR         | Denitration and Mineralization Reformer  |
| DOE         | Department of Energy   |
| DOE-ID      | DOE Idaho Operations Office  |
| dscf        | dry standard cubic feet  |
| EPA         | U.S. Environmental Protection Agency   |
| °F          | degree Fahrenheit  |
| FCF         | Fuel Conditioning Facility   |
| FGR         | flue gas recirculator  |
| ft          | foot   |
| gal/yr      | gallons per year   |
| gal         | gallon   |
| gr          | grain (1 lb = 7,000 grains)  |
| HEPA        | high efficiency particulate air  |
| hr          | hour   |
| ICE         | Internal Combustion Engine   |
| IDAPA       | Idaho Administrative Procedures Act  |
| ITG         | Idaho Treatment Group, LLC   |
| INL         | Idaho National Laboratory Site   |
| INTEC       | Idaho Nuclear Technology and Engineering Center  |
| IWTU        | Integrated Waste Treatment Unit  |
| JP-4        | Jet Propulsion 4   |
| JP-8        | Jet Propulsion 8   |
| lb          | pound  |
| lb/day      | pounds per day   |
| lb/hr       | pounds per hour  |

|                   |   |
|-------------------|---|
| m <sup>3</sup>    | cubic meters  |
| mg/m <sup>3</sup> | milligrams per cubic meter  |
| MMBtu             | million British thermal units   |
| MMBtu/hr          | million British thermal units per hour  |
| mrem              | millirem (one thousandth of a roentgen equivalent man)  |
| mrem/yr           | millirems per year  |
| MFC               | Materials and Fuels Complex   |
| NAICS             | North American Industry Classification System   |
| NESHAP            | National Emission Standards for Hazardous Air Pollutants  |
| NGLW              | Newly generated liquid waste  |
| NO <sub>x</sub>   | oxides of nitrogen  |
| NRF               | Naval Reactors Facility   |
| NSPS              | New Source Performance Standards  |
| O&M               | operations and maintenance  |
| PM                | particulate matter  |
| PM <sub>10</sub>  | particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (µm) |
| ppm               | parts per million   |
| PTC               | permit to construct   |
| RICE              | Reciprocating Internal Combustion Engine  |
| RWMC              | Radioactive Waste Management Complex  |
| SBW               | Sodium bearing liquid waste   |
| SIC               | Standard Industrial Classification  |
| SMC               | Specific Manufacturing Capability   |
| SO <sub>2</sub>   | sulfur dioxide  |
| TAN               | Test Area North   |
| TRU               | Transuranic   |
| TSA               | Transuranic Storage Area  |
| TSA-RE            | Transuranic Storage Area Retrieval Enclosure  |
| T/yr              | tons per year   |
| USC               | United States Code  |
| VOC               | volatile organic compound   |
| WIPP              | Waste Isolation Pilot Project   |
| yr                | year  |
| %                 | percent   |

# 1. TIER I OPERATING PERMIT SCOPE

## Purpose

- 1.1 This Tier I operating permit establishes facility-wide requirements in accordance with the Rules for the Control of Air Pollution in Idaho.

This permitting action is a Tier I operating permit renewal in accordance with IDAPA 58.01.01.369.

- 1.2 This Tier I permit incorporates the following applicable requirements to the renewed permit, which were not previously included in the initial Tier I operating permit: 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines; 40 CFR 60 Subpart IIII – Standard of Performance for Stationary Compression Ignition Internal Combustion Engines.

- 1.3 This Tier I permit incorporates the applicable terms and conditions of the PTCs listed below. These existing PTCs remain in effect.

### Materials and Fuels Complex (MFC)

- PTC No. 011-00022 issued February 20, 2003, for the Utility Spray Paint Booth.

### Central Facilities Area (CFA)

None

### Idaho Nuclear Technology and Engineering Center (INTEC)

- PTC No. P-2012.0053 issued September 18, 2012, four distillate oil-fired boilers (CPP-606).
- PTC No. P-2008.0199 issued August 31, 2009, PTC revision for IWTU
- PTC No. P-2007.0076 issued September 12, 2007, COM-UTI-616 Air Compressor at INTEC

### Naval Reactors Facility (NRF)

None

### Test Area North (TAN)

- PTC No. P-2011.0092 issued October 18, 2011, for the SMC.

### Advanced Test Reactor Complex (ATR Complex)

- PTC No. P-000534 issued May 18, 2004, issued for three electrical generators.

### Radioactive Waste Management Complex (RWMC)

- None- see AMWTP

### Advanced Mixed Waste Treatment Project (AMWTP)

- PTC No. 023-00001 issued June 7, 2002, for the AMWTF.

- PTC No. P-2011.0109 issued September 19, 2011, for the TSA-RE.

1.3 This Tier I operating permit supersedes the following permit:

- Tier I Operating Permit No. T1-2009.0114, issued October 30, 2009.

## 2. FACILITY-WIDE CONDITIONS

The following table contains a summary of requirements that apply generally to emissions units at the facility.

**Table 2.1 FACILITY-WIDE CONDITIONS SUMMARY**

| Permit Conditions | Parameter  | Permit Limit/<br>Standard Summary   | Applicable<br>Requirements Reference | Monitoring and<br>Recordkeeping<br>Requirements |
|-------------------|--|---|--------------------------------------|---|
| 2.1               | Fugitive Dust  | Reasonable control  | IDAPA 58.01.01.650-651               | 2.2, 2.3, 2.4                                   |
| 2.5               | Visible Emissions  | 20% opacity for no more than three minutes in any 60-minute period                              | IDAPA 58.01.01.625                   | 2.6   |
| 2.7               | Excess Emissions   | Compliance with IDAPA 58.01.01.130-136  | IDAPA 58.01.01.130-136               | 2.7.1 - 2.7.5.2, 2.23                           |
| 2.8               | Open Burning   | Compliance with IDAPA 58.01.01.600-616  | IDAPA 58.01.01.600-616               | 2.8   |
| 2.9               | Fuel-Burning Equipment   | Compliance with IDAPA 58.01.01.675-681  | IDAPA 58.01.01.675-681               | 2.9.1, 2.23                                     |
| 2.10              | Sulfur Content   | 1.75% or less for residual fuel;<br>0.3% or less for No. 1 fuel;<br>0.5% or less for No. 2 fuel | IDAPA 58.01.01.725                   | 2.10.1, 2.23                                    |
| 2.11              | Process Weight Rate  | Compliance with IDAPA 58.01.01.700-710  | IDAPA 58.01.01.700-703               | 2.23  |
| 2.12              | Performance Testing  | Compliance with IDAPA 58.01.01.157  | IDAPA 58.01.01.157                   | 2.12, 2.23                                      |
| 2.13              | NESHAP – Boiler MACT   | Compliance with 40 CFR 63, Subpart DDDDD  | 40 CFR 63, Subpart DDDDD             | 2.13  |
| 2.14              | Emissions of Radionuclides   | Compliance with 40 CFR Part 61, Subpart H   | 40 CFR Part 61, Subpart H            | 2.14.1, 2.14.2                                  |
| 2.15              | Emissions of Asbestos  | Compliance with 40 CFR Part 61, Subpart M   | 40 CFR Part 61, Subpart M            | 2.15.1, 2.15.2, 2.15.3                          |
| 2.16              | Emissions of HAPs from Off-Site Waste & Recovery Operations              | Compliance with 40 CFR Part 63, Subpart DD  | 40 CFR Part 63, Subpart DD           | 2.16.1 – 2.16.3                                 |
| 2.17              | Emissions Standards for Wood Furniture Operations                        | Compliance with 40 CFR Part 63, Subpart JJ  | 40 CFR Part 63, Subpart JJ           | 2.17.2  |
| 2.18              | NESHAP for Reciprocating Internal Combustion Engines                     | Compliance with 40 CFR Part 63, Subpart ZZZZ  | 40 CFR Part 63, Subpart ZZZZ         | 2.18  |
| 2.19              | Accidental Release Prevention  | Compliance with 40 CFR Part 68, Subpart F   | 40 CFR Part 68, Subpart F            | 2.19  |
| 2.20              | Motor Vehicle Air Conditioners   | Compliance with 40 CFR Part 82, Subpart B   | 40 CFR Part 82, Subpart B            | 2.20  |
| 2.21              | Recycling and Emissions Reductions                                       | Compliance with 40 CFR Part 82, Subpart F   | 40 CFR Part 82, Subpart F            | 2.21  |
| 2.26              | NSPS for New Stationary Compression Ignition Internal Combustion Engines | Compliance with 40 CFR Part 60, Subpart IIII  | 40 CFR 60, Subpart IIII              | 2.26  |

### Fugitive Dust

- 2.1 All reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with the Rules for Control of Fugitive Dust IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650, 651, 5/1/94]

2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive dust emissions.

**[IDAPA 58.01.01.322.06, 07, 5/1/94]**

2.3 The permittee shall maintain records of all fugitive dust complaints received by the facility. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall, at a minimum, include the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

**[IDAPA 58.01.01.322.06, 07, 5/1/94]**

2.4 The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive dust emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive dust emissions are effective. If fugitive dust emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive dust emission inspection. The records shall, at a minimum, include the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive dust emissions were present (if observed), any corrective action taken in response to the fugitive dust emissions, and the date the corrective action was taken.

Notwithstanding IDAPA 58.01.01.157, no prior notification is required for inspections of potential sources of fugitive dust emissions required by this section of the permit.

**[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]**

## **Visible Emissions**

2.5 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emissions to comply with the requirements of this section.

**[IDAPA 58.01.01.625, 4/5/00]**

2.6 The permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. Sources that are monitored using a continuous opacity monitoring system (COMS) are not required to comply with this permit condition. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either:

a) take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).

or

b) perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 readings shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136.

Notwithstanding IDAPA 58.01.01.157, no prior notification is required for inspections of potential sources of visible emissions required by this section of the permit.

**[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]**

## **Excess Emissions**

2.7 Unless specified elsewhere in this permit, the permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between the subsections of Permit Condition 2.7 and the regulations of IDAPA 58.01.01.130-136.

**[IDAPA 58.01.01.130-136, 4/5/00]**

2.7.1 The person responsible for or in charge of a facility during an excess emissions event shall, with all practicable speed, initiate and complete appropriate and reasonable action to correct the conditions causing such excess emissions event; to reduce the frequency of occurrence of such events; to minimize the amount by which the emission standard is exceeded; and shall, as provided below or upon request of DEQ, submit a full report of such occurrence, including a statement of all known causes, and of the scheduling and nature of the actions to be taken.

**[IDAPA 58.01.01.132, 4/5/00]**

2.7.2 In all cases where startup, shutdown, or scheduled maintenance of any equipment or emission unit is expected to result or results in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.133.01(a) through (d), including, but not limited to, the following:

**[IDAPA 58.01.01.133, 4/5/00]**

2.7.2.1 No scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory and/or a Wood Stove Curtailment Advisory has been declared by DEQ, for the area where the source is located, within an area designated as a PM-10 nonattainment area.

**[IDAPA 58.01.01.133.01.a, 3/20/97]**

2.7.2.2 Notifying DEQ of scheduled excess emissions event as soon as reasonably possible, but no later than two hours prior to the start of the excess emission event, unless the owner or operator demonstrates to DEQ's satisfaction that a shorter advanced notice was necessary.

**[IDAPA 58.01.01.133.01.b, 4/5/00]**

2.7.2.3 The owner or operator of a source of excess emissions shall report and record the information required pursuant to Permit Conditions 2.7.4 and 2.7.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

**[IDAPA 58.01.01.133.01.c, 3/20/97]**

2.7.3 In all cases where upset or breakdown of equipment or an emissions unit, or the initiation of safety measures, results or may result in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.134.01(a) and (b) and the following:

**[IDAPA 58.01.01.134, 4/5/00]**

2.7.3.1 For all equipment or emissions units from which excess emissions result during upset or breakdown conditions, or for other situations that may necessitate the implementation of safety measures which cause excess emissions, the facility owner or operator shall comply with the following:

**[IDAPA 58.01.01.134.02, 4/5/00]**

The owner or operator shall immediately undertake all appropriate measures to reduce and, to the extent possible, eliminate excess emissions resulting from the event and to minimize the impact of such excess emissions on the ambient air quality and public health.

**[IDAPA 58.01.01.134.02.a, 4/5/00]**

The owner or operator shall notify DEQ of any upset, breakdown, or safety event that results in excess emissions. Such notification shall identify the time, specific location, equipment or emissions unit involved, and (to the extent known) the cause(s) of the occurrence. The notification shall be given as soon as reasonably possible, but no later than 24 hours after the event, unless the owner or operator demonstrates to DEQ's satisfaction that the longer reporting period was necessary.

**[IDAPA 58.01.01.134.02.b, 4/5/00]**

The owner or operator shall report and record the information required pursuant to Permit Conditions 2.7.4 and 2.7.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event caused by an upset, breakdown, or safety measure.

**[IDAPA 58.01.01.134.02.c, 3/20/97]**

- 2.7.3.2 During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, DEQ may require the owner or operator to immediately reduce or cease operation of the equipment or emissions unit causing the excess emissions until such time as the condition causing the excess emissions has been corrected or brought under control. Such action by DEQ shall be taken upon consideration of the factors listed in IDAPA 58.01.01.134.03 and after consultation with the facility owner or operator.

**[IDAPA 58.01.01.134.03, 4/5/00]**

- 2.7.4 A written report for each excess emissions event shall be submitted to DEQ by the owner or operator no later than 15 days after the beginning of such an event. Each report shall contain the information specified in IDAPA 58.01.01.135.02.

**[IDAPA 58.01.01.135.01, 3/20/97; IDAPA 58.01.01.135.02, 4/5/00]**

- 2.7.5 The owner or operator shall maintain excess emissions records at the facility for the most recent five-calendar-year period. The excess emissions records shall be made available to DEQ upon request. The excess emissions records shall include the information requested by IDAPA 58.01.01.136.03(a) and (b) as summarized in the following:

**[IDAPA 58.01.01.136.01, 02, 3/20/97; IDAPA 58.01.01.136.03, 4/5/00]**

- 2.7.5.1 An excess emissions record book for each emissions unit or piece of equipment containing copies of all reports that have been submitted to DEQ pursuant to IDAPA 58.01.01.135 for the particular emissions unit or equipment.

**[IDAPA 58.01.01.136.03.a, 4/5/00]**

- 2.7.5.2 Copies of all startup, shutdown, and scheduled maintenance procedures and upset, breakdown, and safety preventative maintenance plans that have been developed by the owner or operator in accordance with IDAPA 58.01.01.133 and 134, and facility records as necessary to demonstrate compliance with such procedures and plans.

**[IDAPA 58.01.01.136.03.b, 3/20/97]**

## **Open Burning**

- 2.8 The permittee shall comply with the requirements of IDAPA 58.01.01.600-624, Rules for Control of Open Burning.

**[IDAPA 58.01.01.600-624, 3/29/12]**

## Fuel-Burning Equipment

- 2.9 The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gas, or 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid.

[IDAPA 58.01.01.676, 677, 5/1/94]

- 2.9.1 The permittee shall maintain records of the fuel-type procured for boiler use.

[IDAPA 58.01.01.322.07, 5/1/94]

## Sulfur Content

- 2.10 No person shall sell, distribute, use, or make available for use any fuel oil containing more than the following percentages of sulfur except as exempted in accordance with IDAPA 58.01.01.725.05:

- Residual fuel oil - 1.75% by weight
- ASTM Grade 1 fuel oil - 0.3% by weight
- ASTM Grade 2 fuel oil - 0.5% by weight

[IDAPA 58.01.01.725, 5/8/09]

- 2.10.1 The permittee shall maintain documentation of supplier verification of fuel oil on an as-received basis.

[IDAPA 58.01.01.322.07, 5/1/94]

## Particulate Matter - Process Weight Limitations

- 2.11 No person shall emit to the atmosphere from any process or process equipment operating prior to October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour (lb/hr), and PW is the process weight in pounds per hour:

- a. If PW is less than 17,000 lb/hr,  
 $E = 0.045(PW)^{0.60}$
- b. If PW is equal to or greater than 17,000 lb/hr,  
 $E = 1.12(PW)^{0.27}$

No person shall emit to the atmosphere from any process or process equipment operating on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

- a. If PW is less than 9,250 lb/hr,  
 $E = 0.045(PW)^{0.60}$
- b. If PW is equal to or greater than 9,250 lb/hr,  
 $E = 1.10(PW)^{0.25}$

[IDAPA 58.01.01.700-703, 5/3/03]

## Performance Testing

- 2.12 If performance testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent

decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of test method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

Within 30 days following the date in which a compliance test required by this permit is concluded, the permittee shall submit to DEQ a report for the respective test. The compliance test report shall include all process operating data collected during the test period as well as the test results, raw test data, and associated documentation, including any approved test protocol.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to the following:

Air Quality Permit Compliance  
Department of Environmental Quality  
Idaho Falls Regional Office  
900 N. Skyline, Suite B  
Idaho Falls, ID 83402  
Telephone: (208) 528-2650 Fax: (208) 528-2695

In accordance with 40 CFR 60.4, all 40 CFR 60 (NSPS) test information shall be submitted in duplicate to the Region 10 Office of the EPA to the attention of the Director of the Office of Air Quality at the following address. Copies of all test information required to be submitted to the EPA for applicable New Source Performance Standards (NSPS) requirements and National Emission Standards for Emissions of Radionuclides other than Radon from Department of Energy Facilities, shall also be submitted to DEQ.

EPA Region 10  
Air Operating Permits, OAQ-107  
1200 Sixth Ave.  
Seattle, WA 98101

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

## **NESHAP 40 CFR 63, Subpart DDDDD Requirements**

### **Applicability**

- 2.13 The existing boilers at INL are subject to 40 CFR 63, Subpart DDDDD. The final rule was promulgated on March 21, 2011. Its effectiveness was then delayed by the EPA on May 18th, 2011. The rule has been under reconsideration with proposed changes since December 23, 2011. Until such time EPA issues the final rule, no further requirements of the Subpart are added to the permit at this time. Applicable requirements will be added to the permit during the next amendment, revision, reopening for cause or renewal action. Therefore, this section is reserved for Subpart DDDDD.

## **National Emission Standards for Emissions of Radionuclides other than Radon from Department of Energy Facilities**

- 2.14 Emissions of radionuclides to the ambient air from Department of Energy facilities shall not exceed those amounts that would cause any member of the public to receive, in any year, an effective dose equivalent of 10 millirem per year (mrem/yr).
- 2.14.1 In accordance with 40 CFR 61.93, the permittee shall determine radionuclide emissions and calculate effective dose equivalent values to members of the public using EPA-approved methods.
- 2.14.2 The permittee shall submit annual reports and maintain records documenting radionuclide emissions and effective dose equivalent values in accordance with 40 CFR 61.94 and 40 CFR 61.95.  
**[40 CFR 61, Subpart H]**

## **National Emission Standard for Asbestos**

- 2.15 The permittee shall comply with the following:
  - 2.15.1 Any renovation or demolition activity planned at the facility shall be conducted in accordance with 40 CFR 61.145. New materials to be used during any renovation at the facility shall comply with standards given in 40 CFR 61.146 for spray-on materials and 40 CFR 61.148 for insulating materials.
  - 2.15.2 Waste disposal for demolition, renovation, and spraying operations shall be conducted in accordance with 40 CFR 61.150 in prevention of visible emissions to the outside air of any asbestos-containing material. Air cleaning during demolition and renovation activities shall be conducted in accordance with 40 CFR 61.152. Reporting shall occur in accordance with 40 CFR 61.153.
  - 2.15.3 The permittee shall operate active waste disposal facilities for asbestos-containing material in accordance with 40 CFR 61.154.  
**[40 CFR 61, Subpart M]**

## **National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations**

- 2.16 In accordance with 40 CFR 63 Subpart DD, the owner or operator of affected sources subject to this subpart is exempted from the requirements of §63.682 through §63.699 when the total annual quantity of the HAP contained in the off-site material received at the plant is less than one megagram per year. The definition of off-site material is specified in §63.680(b). The owner or operator must meet the requirements contained in §63.680(d)(1) through §63.680(d)(3) to qualify for this exemption as follows:
  - 2.16.1 In accordance with §63.680(d)(1), the owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material received at the plant site.
  - 2.16.2 In accordance with §63.680(d)(2), the owner or operator must prepare a new determination whenever the extent of changes to the quantity or composition of the off-site material received at the plant site could cause the total annual HAP quantity to exceed the one megagram per year limit.
  - 2.16.3 In accordance with §63.680(d)(3), the owner or operator must maintain documentation of the determination of the total HAP quantity in the off-site material received at the plant. This documentation must include the basis and data used for determining the HAP content of the off-site material.  
**[40 CFR 63, Subpart DD]**

## **National Emission Standards for Wood Furniture Manufacturing Operations**

- 2.17 In accordance with 40 CFR 63 Subpart JJ, the owner or operator may be exempted from this subpart provided the following requirements are met:
- 2.17.1 In accordance with §63.801(a), the owner or operator meets the definition of a incidental wood manufacture which means a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in manufacture of wood furniture or wood furniture components.
- 2.17.2 In accordance with §63.800(a), the owner or operator shall maintain purchase or usage records to demonstrate that total monthly usage rates of finishing material or adhesives are less than 100 gallons per month. In accordance with §63.801(a), finishing materials are defined as materials which include, but are not limited to, coatings, stains, basecoats, washcoats, enamels, sealers, and topcoats.  
[40 CFR 63, Subpart JJ]

## **National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – 40 CFR 63 Subpart ZZZZ**

- 2.18 The permittee shall comply with 40 CFR 63 Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, as applicable, and all applicable general provisions of 40 CFR 63 Subpart A. Within the context of 40 CFR 63 Subpart ZZZZ, the terms “you” and “your” mean “permittee” and “permittee’s” respectively.

Subpart ZZZZ applies to each affected source that is any existing, new, or reconstructed stationary Reciprocating Internal Combustion Engine (RICE) located at a major or area source of HAP emissions.

Pursuant to 40 CFR 63 Subpart A and §63.10(b)(3), for affected stationary RICE which are exempted from the requirements of Subpart ZZZZ or the requirements of Subpart A, the permittee shall maintain documentation which demonstrates the affected stationary RICE’s exemption.

Pursuant to §63.6590(b), existing emergency and existing limited use stationary RICE with a site rating of more than 500 brake HP do not have to meet the requirements of Subpart ZZZZ, Subpart A and permit conditions 2.18.1 through 2.18.7.

Further permit conditions for emergency stationary RICE that are less than or equal to 500 HP are listed in conditions 2.18.1 through 2.18.7.

Permit conditions for non-emergency stationary RICE are listed in the respective INL-site facility section(s), except that permit condition 2.18.7 (Other Requirements and Information, also known as Subpart A general provisions) is applicable to all INL-site non-emergency stationary RICE unless otherwise exempted by Subpart ZZZZ.

[40 CFR 63 Subpart ZZZZ]

### **2.18.1 40 CFR 63.6595(a) - Compliance Date for Affected Sources**

In accordance with 40 CFR 63.6595(a), the permittee must comply with the applicable 40 CFR 63 Subpart ZZZZ emission limitations and operating limitations no later than the date(s) specified in §63.6595.

[40 CFR 63.6595]

### **2.18.2 40 CFR 63, Subpart ZZZZ – Operating Limitations**

On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall meet the applicable requirements specified in Table 2.18.1 (Table 2c to Subpart ZZZZ of Part 63) in accordance with 40 CFR 63.6602 for the respective emergency stationary RICE.

**Table 2.18.1 EMERGENCY STATIONARY RICE - SUMMARY OF TABLE 2c TO SUBPART ZZZZ OF PART 63**

| For each . . .   | You must meet the following requirement, except during periods of startup . . .  | During periods of startup you must . . .  |
|--|--|---|
| Existing emergency stationary CI RICE ≤ 500 HP. <sup>a</sup> | <ul style="list-style-type: none"> <li>Change oil and filter every 500 hours of operation or annually, whichever comes first;<sup>b</sup></li> <li>Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;</li> <li>Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.<sup>c</sup></li> </ul>     | 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. <sup>c</sup> |
| Existing emergency stationary SI RICE ≤ 500 HP. <sup>a</sup> | <ul style="list-style-type: none"> <li>Change oil and filter every 500 hours of operation or annually, whichever comes first;<sup>b</sup></li> <li>Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and</li> <li>Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.<sup>c</sup></li> </ul> | 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. <sup>c</sup> |

- a) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c, of this subpart, or if performing the work 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 work 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 work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
- b) Sources have the option to utilize an oil analysis program as described in §63.6625(i) and (j) in order to extend the specified oil change requirement in Table 2c of this subpart
- c) Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[40 CFR 63.6602]

### 2.18.3 40 CFR 63, Subpart ZZZZ – General Compliance Requirements

On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall at all times operate and maintain the emergency engine(s) that are less than or equal to 500 HP, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions, in accordance with 40 CFR 63.6605.

[40 CFR 63.6605]

### 2.18.4 40 CFR 63, Subpart ZZZZ – Operation and Monitoring Requirements

For emergency engine(s) that are less than or equal to 500 HP, on and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall meet the monitoring, installation, collection, operation, and maintenance requirements specified in Subpart ZZZZ of Part 63 in accordance with 40 CFR 63.6625. The permittee shall:

- Operate and maintain the emergency engine(s) and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine(s) in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with 40 CFR 63.6625(e).

- Install a non-resettable hour meter if one is not already installed, in accordance with 40 CFR 63.6625(f).
- 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(s), not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2.18.1 (Table 2c to Subpart ZZZZ) apply, in accordance with 40 CFR 63.6625(h).
- Have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2.18.1 (Table 2c to Subpart ZZZZ) in accordance with 40 CFR 63.6625 (i) and (j). The analysis program must be part of the maintenance plan for the engine(s).
  - If any of the limits are exceeded, the oil shall be changed within 2 days of receiving the results of the analysis; if the engine(s) is not in operation when the results of the analysis are received, the oil shall be changed within 2 days or before commencing operation, whichever is later.
  - The permittee shall 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(s).

**[40 CFR 63.6625]**

**2.18.5 40 CFR 63, Subpart ZZZZ – Continuous Compliance Requirements**

On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall demonstrate continuous compliance with each applicable emission limitation and operating limitation in Table 2.18.1 according to the methods specified in Table 2.18.2 (Table 6 to Subpart ZZZZ of Part 63), in accordance 40 CFR 63.6640(a).

**Table 2.18.2 SUMMARY OF TABLE 6 TO SUBPART ZZZZ OF PART 63**

| For each ...   | Complying with the requirement to ... | You must demonstrate continuous compliance by ...  |
|--|---------------------------------------|--|
| Existing emergency stationary RICE ≤ 500 HP located at a major source of HAP | Work or Management practices          | <ul style="list-style-type: none"> <li>• Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or</li> <li>• Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.</li> </ul> |

- On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall report each instance in which each applicable emission limitation or operating limitation in Table 2c to Subpart ZZZZ was not met in accordance with 40 CFR 63.6640(b). These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 CFR 63.6650. Existing and new emergency stationary RICE greater than 500 HP and stationary RICE subject to regulation under 40 CFR Part 60 Subpart IIII (for CI engines) and Subpart JJJJ (for SI engines) that meet any of the criteria in paragraphs 63.6590(c)(1) through (7) are exempt from this permit condition.
- The permittee shall also report each instance in which the applicable requirements in Table 8 to Subpart ZZZZ of Part 63 were not met in accordance with 40 CFR 63.6640(e).
- On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall operate the emergency engine(s) according to the requirements in 40 CFR 63.6640(f)(1)(i) through (iii). Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. If you do not operate the engine(s) according to these requirements, the engine(s) will not be considered an emergency engine(s) and will need to meet all requirements for non-emergency engines.

- There is no time limit on the use of emergency stationary RICE in emergency situations.
- The permittee shall operate the emergency engine(s) 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(s). Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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.
- The permittee may operate the emergency engine(s) up to 50 hours per year in non-emergency situations, but those 50 hours are counted toward the 100 hours per year provided for maintenance and testing.

[40 CFR 63.6640]

#### 2.18.6 **40 CFR 63, Subpart ZZZZ – Notifications, Reports, and Records**

- On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall submit all of the notifications specified in 40 CFR 63.6645 in accordance with 40 CFR 63.6645.
- Any notifications or reporting required by 40 CFR 63, Subpart ZZZZ or Subpart A shall be submitted to the addresses listed in the Reports and Certifications permit conditions of these Facility-Wide conditions.
- The permittee may, in accordance with §63.6650(b)(5), submit the required semiannual compliance reports by February 28 or August 31 for the respective preceding calendar half for any affected source that had a compliance date in the calendar half or any preceding calendar half. This report may be submitted with the semiannual report required by Permit Condition 24 of General Provisions Semiannual Monitoring Reports requirement and shall be deemed to satisfy any obligation to report by Subpart ZZZZ provided the report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ.
- The permittee may, in accordance with §63.6650(b)(5), submit the required annual compliance reports by February 28 for the respective preceding calendar year for any affected source that had a compliance date in the calendar year or any preceding calendar year. This report may be submitted with the Periodic Compliance Certification required by Permit Condition 21 of General Provisions Periodic Compliance Certification requirement and shall be deemed to satisfy any obligation to report by Subpart ZZZZ provided the report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ.
- On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall keep the records described in 40 CFR 63.6655 in accordance with 40 CFR 63.6655 and 40 CFR 63.6660.
  - A copy of each notification and report that you submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any initial notification or notification of compliance status that you submitted.
  - For emergency engine(s) that are less than or equal to 500 HP, records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
  - For emergency engine(s) that are less than or equal to 500 HP, records of all required maintenance performed on the air pollution control and monitoring equipment.
  - For emergency engine(s) that are less than or equal to 500 HP, records of actions taken during periods of malfunction to minimize the emissions in accordance with 40 CFR 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.

- For emergency engine(s) that are less than or equal to 500 HP, the permittee shall keep the records required in Table 2.18.2 (Table 6 to Subpart ZZZZ) to show continuous compliance with each emission or operating limitation that applies to you.
- For emergency engine(s) that are less than or equal to 500 HP, the permittee shall 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.
- Records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).
- The permittee shall keep each record, readily accessible in hard copy or electronic form, for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6645, 63.6655, 63.6660]

#### 2.18.7 40 CFR 63, Subpart ZZZZ – Other Requirements and Information

On and after the applicable compliance date(s) specified in 40 CFR 63.6595, the permittee shall comply with the applicable portion of general provisions in Table 8 to 40 CFR 63, Subpart ZZZZ in accordance with 40 CFR 63.6665.

The permittee shall comply with the requirements of 40 CFR 63 Subpart A – General Provisions.

[40 CFR 63.6611, 40 CFR 63.6665, 40 CFR 63 Subpart A]

### **Regulated Substances for Accidental Release Prevention**

2.19 An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions 40 CFR 68 no later than the latest of the following dates:

2.19.1 Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.

2.19.2 The date on which a regulated substance is first present above a threshold quantity in a process.

[40 CFR 68, Subpart F]

### **Servicing of Motor Vehicle Air Conditioners**

2.20 The permittee shall comply with applicable standards for motor vehicle air conditioner maintenance activities pursuant to 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

[40 CFR 82, Subpart B]

### **Recycling and Emissions Reductions**

2.21 The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

### **Monitoring and Recordkeeping**

2.22 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical

techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request. The permittee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emission unit did not operate at any time between required monitoring events, provided the following conditions are met:

- a) in the case of a permanent shut down of the emission unit:
  - i) the permittee makes a contemporaneous record in a log or file maintained on site of the date that the emission unit ceased operation.
- b) in the case of a temporary shut down of the emission unit:
  - i) the permittee makes a contemporaneous record in the log or file maintained on site of the date that the emission unit ceased operation and the reason why the emission unit did not operate.
  - ii) the permittee makes a contemporaneous record in a log or file maintained on site of the date that the emission unit resumed operation.

[IDAPA 58.01.01.322.07, 5/1/94]

- 2.23 In absence of any other credible evidence, compliance with the pounds per hour and tons per year existing in this permit is assured by complying with this permit's operating, monitoring and recordkeeping requirements.

[IDAPA 58.01.01.322.06, 5/1/94]

## Reports and Certifications

- 2.24 Reports for any required monitoring shall be submitted at least every six months. Excess emissions reports and notifications shall be submitted in accordance with IDAPA 58.01.01.130-136. Reports, certifications, and notifications shall be submitted to:

Air Quality Permit Compliance  
Department of Environmental Quality  
Idaho Falls Regional Office  
900 N. Skyline, Suite B  
Idaho Falls, ID 83402  
Telephone: (208) 528-2650 Fax: (208) 528-2695

The periodic compliance certification required by General Provision 21 shall also be submitted to:

EPA Region 10  
Air Operating Permits, OAQ-107  
1200 Sixth Ave.  
Seattle, WA 98101

[IDAPA 58.01.01.322.08, 11, 4/5/00]

## Incorporation of Federal Requirements by Reference

- 2.25 Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for

the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, Subparts Dc and III.
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR Part 61, Subparts H and; and Part 63, Subpart ZZZZ.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS or NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

[IDAPA 58.01.01.107, 4/7/11; 40 CFR Parts 60, 61, and 63]

## **Standards of Performance for New Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) – 40 CFR 60 Subpart III**

2.26 The permittee shall comply with 40 CFR 60 Subpart III-Standards of Performance for New Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), as applicable, and all applicable general provisions of 40 CFR 60 Subpart A. Within the context of 40 CFR 60 Subpart III, the terms “you” and “your” mean “permittee” and “permittee’s” respectively.

### **2.26.1 40 CFR 60.4207 – Fuel Requirements**

In accordance with 40 CFR 60.4207(a), fuel purchased on or after October 1, 2010 for use in the stationary CI ICE shall meet the following per-gallon standard [derived from 40 CFR 80.510(b), which is incorporated by reference into 40 CFR 60.4207(a)]:

(1) Sulfur content.

(i) 15 ppm maximum for Nonroad (NR) diesel fuel.

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

[40 CFR 60.4207]

### **2.26.2 40 CFR 60.4211 – Compliance Requirements**

- In accordance with 40 CFR 60.4211(a), the permittee must operate and maintain the stationary CI ICE and control device according to the manufacturer's emission-related written instructions. In addition, owners and operators change only those emission-related settings that are permitted by the manufacturer. The permittee must also meet the requirements of 40 CFR parts 89, and/or 1068, as they apply to you.
- In accordance with 40 CFR 60.4211(c) the permittee must comply by purchasing an engine certified to the emission standards §60.4205(b) or §60.4205(c), as applicable. The engine must be installed and configured according to the manufacturer’s emission-related specifications, except as permitted in §60.4211(g).
- In accordance with 40 CFR 60.4211(f) emergency stationary ICE may be operated 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. There is no time limit on the use of emergency stationary ICE in emergency situations.

- The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- Emergency stationary ICE may operate 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 non-emergency power as part of a financial arrangement with another entity.
- For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as permitted in this section, is prohibited.

[40 CFR 60.4211]

**2.26.3 40 CFR 60.4209 – Monitoring Requirements**

In accordance with 40 CFR 60.4209(a) the emergency stationary CI ICE shall have a non-resettable hour meter installed prior to startup of the engine.

[40 CFR 60.4209]

**2.26.4 40 CFR 60.4218, General Provisions to NSPS 40 CFR 60 Subpart A**

- The permittee is not required to submit an initial notification as required in 40 CFR 60.7(a)(1) for the emergency stationary CI ICE, in accordance with 40 CFR 60.4214(b).
- The permittee shall comply with Table 8 to Subpart IIII of Part 60-Applicability of General Provisions to Subpart IIII.
- The permittee shall comply with the requirements of 40 CFR 63 Subpart A – General Provisions.

[40 CFR 60.4218, 40 CFR 60 Subpart A]

### 3. MATERIALS AND FUELS COMPLEX (MFC)

#### 3.1 Utility Spray Paint Booth

##### Summary Description

The utility paint booth is a maintenance paint booth and is not used as part of any production line. Items to be painted will vary in both material type and configuration.

Table 3.1 contains only a summary of the requirements that apply to the paint booth. Specific permit requirements are listed below Table 3.1.

**Table 3.1 APPLICABLE REQUIREMENTS SUMMARY**

| Permit Conditions | Parameter                    | Permit Limit / Standard Summary                       | Applicable Requirements Reference | Monitoring, Recordkeeping, and Reporting Requirements |
|-------------------|------------------------------|---|-----------------------------------|---|
| 3.1.1             | VOC                          | VOC limited to 0.8 T/yr                               | PTC No. 011-00022                 | 3.1.7   |
| 3.1.1             | PM                           | PM limited to 0.2 T/yr                                | PTC No. 011-00022                 | 3.1.7   |
| 3.1.2             | Types of paints and solvents | As per permit application or comparable replacement   | PTC No. 011-00022                 | 3.1.7   |
| 3.1.3             | O&M manual                   | Maintain and implement an O&M manual                  | PTC No. 011-00022                 | 3.1.3   |
| 3.1.4             | Exhaust filters required     | Spray booth shall not operate without exhaust filters | PTC No. 011-00022                 | 3.1.4   |
| 3.1.5             | Filter efficiency            | Minimum 87% particulate control                       | PTC No. 011-00022                 | 3.1.6   |

##### Permit Limits/Standard Summary

##### Emissions Limits

- 3.1.1 The particulate matter (PM) and volatile organic compound (VOC) emissions from the utility paint spray booth stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

**Table 3.2 UTILITY PAINT SPRAY BOOTH EMISSIONS<sup>a</sup> LIMITS**

| Source Description        | PM                | VOC               |
|---------------------------|-------------------|-------------------|
|                           | T/yr <sup>b</sup> | T/yr <sup>b</sup> |
| Utility Paint Spray Booth | 0.2               | 0.8               |

<sup>a</sup> As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by the DEQ's emissions estimation methods used in this permit analysis.

<sup>b</sup> tons per consecutive 12-month period

[PTC No. 011-00022, 2/20/03]

##### Operating Requirements

- 3.1.2 Only those paints and solvents as submitted in the permit application, or comparable replacements, which comply with the emissions limits in Permit Condition 3.1.1 of this permit may be used in the utility paint spray booth unless prior DEQ approval is obtained.

[PTC No. 011-00022, 2/20/03]

- 3.1.3 The permittee shall maintain and implement an O&M manual for the exhaust filter. This manual shall contain, at a minimum, the filter replacement schedule. The manual shall remain on site and be made available to DEQ representatives upon request.  
**[PTC No. 011-00022, 2/20/03]**
- 3.1.4 The utility paint spray booth shall not be operated unless all exhaust filters are in place and intact.  
**[PTC No. 011-00022, 2/20/03]**
- 3.1.5 Only filters which have a manufacturer guarantee to remove at least 87% of particulate shall be used in the cabinet type exhaust chamber.  
**[PTC No. 011-00022, 2/20/03]**

### **Monitoring, Recordkeeping, and Reporting Requirements**

- 3.1.6 The permittee shall maintain documentation of the type and manufacturer's guarantee of particulate removal efficiency for all filters that are used in the exhaust chamber to demonstrate compliance with Permit Condition 3.1.5. All records shall be maintained on site in accordance with Permit Condition 2.22.  
**[IDAPA 58.01.01.322.06, 07, 5/1/94]**
- 3.1.7 The permittee shall maintain records of the types, quantities, solvent content, and date of application for all paints and solvents used in the paint booth. The permittee shall calculate the total VOC emissions for the previous month assuming all solvents are emitted to the atmosphere. All records shall be maintained on site in accordance with permit condition 2.22.  
**[IDAPA 58.01.01.322.06, 07, 5/1/94, PTC No. 011-00022, 2/20/03]**

#### **4. CENTRAL FACILITIES AREA (CFA)**

##### **Summary Description**

The only requirements that apply to the CFA are in the facility-wide conditions located in Section 2 of this permit.

## 5. IDAHO NUCLEAR TECHNOLOGY AND ENGINEERING CENTER (INTEC)

In addition to the facility-wide permit conditions listed in Section 2 of this permit Table 5.1 contains a summary of additional requirements that apply to sources at INTEC.

**Table 5.1 APPLICABLE REQUIREMENTS SUMMARY**

| Permit Conditions                             | Parameter             | Permit Limits / Standard Summary                                    | Applicable Requirements Reference    | Monitoring, Recordkeeping, and Reporting Requirements |
|---|-----------------------|---|--------------------------------------|---|
| <b>CPP-606 Boilers</b>                        |                       |   |                                      |   |
| 5.1.1   | SO <sub>2</sub>       | Not to exceed 895 lb/day; 163 tons per consecutive 12-month period  | PTC No. P-030505                     | 5.1.9   |
| 5.1.1   | NO <sub>x</sub>       | Not to exceed 415 lb/day; 75.6 tons per consecutive 12-month period | PTC No. P-030505                     | 5.1.9   |
| 5.1.7   | Fuel combustion limit | Not to exceed 20,736 gallons per day                                | PTC No. P-030505                     | 5.1.9   |
| 5.1.5   | Fuel oil              | Only combust distillate oil   | PTC No. P-030505                     | 5.1.8   |
| 5.1.5   | Fuel oil sulfur limit | Sulfur content not to exceed 0.3%                                   | PTC No. P-030505                     | 5.1.8   |
| 2.5, 5.1.3                                    | Visible emissions     | 20% opacity for no more than three minutes in any 60-minute period  | PTC No. P-030505, IDAPA 58.01.01.625 | 2.6, 2.23   |
| 5.1.4   | Visible emissions     | 20% opacity six-minute average in any period hour                   | PTC No. P-030505, 40 CFR 60.43c      | 5.1.4   |
| 5.1.2   | PM                    | 0.050 gr/dscf   | PTC No. P-030505                     | 5.1.8   |
| <b>Integrated Waste Treatment Unit (IWTU)</b> |                       |   |                                      |   |
| 5.2.1   | NO <sub>x</sub>       | Not to exceed 39.4 tons per consecutive 12-month period             | PTC No. P-2008.0199                  | 5.2.3, 5.2.5  |
| 5.2.2   | Throughput limit      | Not to exceed 1,114,000 gallons per consecutive 12-month period     | PTC No. P-2008.0199                  | 5.2.4   |
| <b>COM-UTI-616 Air Compressor at INTEC</b>    |                       |   |                                      |   |
| 5.3.1   | NO <sub>x</sub>       | Not to exceed 35.65 T/yr  | PTC No. P-2007.0076                  | 5.3.3   |
| 5.3.2   | Operational Limits    | Not to exceed 5,000 hours per any consecutive 12-month period       | PTC No. P-2007.0076                  | 5.3.3   |

### 5.1 Building CPP-606 Distillate Oil-fired Boilers

#### Summary Description

The following is a narrative description of the emissions sources in Building CPP-606 regulated in this Tier I operating permit. This description is for informational purposes only.

Building CPP-606 includes four boilers with a rated capacity of 36.4 MMBtu/hr each. A flue gas recirculator (FGR) on each boiler provides NO<sub>x</sub> emissions control.

## Permit Limits/Standard Summary

### Emissions Limits

- 5.1.1 The SO<sub>2</sub>, NO<sub>x</sub>, and beryllium emissions from the CPP-606 boiler stacks combined shall not exceed any corresponding emission rate limits listed in Table 5.2.

**Table 5.2 CPP-606 BOILER EMISSIONS LIMITS\***

| Source<br>Description | SO <sub>2</sub> |      | NO <sub>x</sub> |      | Beryllium |          |
|-----------------------|-----------------|------|-----------------|------|-----------|----------|
|                       | lb/day          | T/yr | lb/day          | T/yr | lb/day    | T/yr     |
| CPP-606 boilers       | 895             | 163  | 415             | 75.6 | 1.05E-02  | 1.91E-03 |

\* The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

[PTC No. P-030505, 1/21/04]

- 5.1.2 In accordance with IDAPA 58.01.01.676 (Rules for the Control of Air Pollution in Idaho), the permittee shall not discharge into the atmosphere from the Building CPP-606 boilers stacks any gases that contain particulate matter emissions in excess of 0.05 grains per dry standard cubic foot (gr/dscf) corrected to 3% oxygen.

[PTC No. P-030505, 1/21/04]

- 5.1.3 The permittee shall not discharge into the atmosphere from the Building CPP-606 boilers stacks or any other stack, vent, or functionally equivalent opening, emissions that exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period, as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[PTC No. P-030505, 1/21/04]

- 5.1.4 In accordance with 40 CFR 60.43c, the permittee shall not discharge into the atmosphere from the Building CPP-606 boilers stacks any gases that exhibit greater than 20% opacity (six-minute average), except for one six-minute period per hour of not more than 27% opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, or malfunction. Opacity shall be determined by the procedures specified in 40 CFR Part 60.

[40 CFR 60.43c, PTC No. P-030505, 1/21/04]

### Operating Requirements

- 5.1.5 The permittee shall combust distillate oil only in the Building CPP-606 boilers. The distillate oil combusted in these boilers shall not contain greater than 0.3 weight percent sulfur.

[PTC No. P-030505, 1/21/04]

- 5.1.6 In accordance with 40 CFR 60.41c, distillate oil means fuel oil that complies with the specification for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975-11b, "Standard Specification for Fuel Oils".

[40 CFR 60.41c, PTC No. P-030505, 1/21/04]

- 5.1.7 The total amount of boiler fuel combusted for all Building CPP-606 boilers shall not exceed 20,736 gallons per day.

[PTC No. P-030505, 1/21/04]

### Monitoring, Recordkeeping, and Reporting Requirements

- 5.1.8 To demonstrate compliance with Sections 5.1.5 and 5.1.6 of this permit, the fuel oil supplier shall certify all boiler fuel combusted in the Building CPP-606. In accordance with 40 CFR 60.48c(f), fuel oil supplier certification shall include the name of the fuel oil supplier, and a statement from the fuel oil supplier that the fuel oil complies with the specifications under the definition of distillate oil in 40

CFR 60.41c. The permittee shall also maintain documentation of the fuel sulfur content of oil used in the boilers. All records shall be maintained for a period of five years and in accordance with Permit Condition 2.22.

[40 CFR 60.48c(f), PTC No. P-030505, 1/21/04, IDAPA 58.01.01.322.06, 5/1/94]

- 5.1.9 In accordance with 40 CFR 60.48.c(g)(1), the permittee shall monitor and record the amount of boiler fuel combusted in the Building CPP-606 boilers. The amount of boiler fuel combusted shall be recorded as gallons per day (gal/day). All records shall be maintained for a period of five years and in accordance with Permit Condition 2.22.

[40 CFR 60.48c(g), PTC No. P-030505, 1/21/04, IDAPA 58.01.01.322.07, 5/1/94]

- 5.1.10 In accordance with 40 CFR 60.42c(h), to demonstrate compliance with Section 5.1.6 of this permit shall consist of certification from the fuel supplier. In accordance with 40 CFR 60.48c(f), fuel supplier certification shall include the following information for distillate oil: (1) the name of the oil supplier; (2) a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and (3) the sulfur content or maximum sulfur content of the oil.

[40 CFR 60.44c(h), PTC No. P-030505, 1/21/04]

- 5.1.11 In accordance with 40 CFR 60.48c(d), the permittee shall submit semi-annual reports to the DEQ Idaho Falls Regional Office. In accordance with 40 CFR 60.48c(j), the reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to DEQ Idaho Falls Regional Office and shall be postmarked by the 30th day following the end of the reporting period. Each submitted semi-annual report shall contain the information required by 40 CFR 60.48c(e), as applicable. The DEQ Idaho Falls Regional Office mailing address is:

Idaho Department of Environmental Quality  
Idaho Falls Regional Office - Air Quality  
900 N. Skyline, Ste B  
Idaho Falls, ID 83402

[40 CFR 60.48c(d), PTC No. P-2012.0053, 9/18/12]

- 5.1.12 In accordance with 40 CFR 60.48c(i), the permittee shall maintain all records of the information required by 40 CFR 60.48c(e). The permittee shall maintain the records for a period of five years following the date of such record.

[40 CFR 60.48c(i), PTC No. P-030505, 1/21/04, IDAPA 58.01.01.322.07, 5/1/94]

- 5.1.13 In accordance with 40 CFR 60 Subpart A, General Provisions for Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the permittee must comply with the requirements in General Provisions of 40 CFR 60, Subpart A.

[40 CFR 60 Subpart A, IDAPA 58.01.01.322.07, 5/1/94]

## 5.2 Integrated Waste Treatment Unit (IWTU)

### Summary Description

The following is a narrative description of the emissions sources at the Integrated Waste Treatment Unit (IWTU) that are regulated in this Tier I operating permit. This description is for informational purposes only.

### Process Description

The IWTU is designed to treat liquid sodium bearing waste (SBW) and newly generated liquid waste (NGLW) to produce a solid treatment product for ultimate disposal. The IWTU will utilize steam reforming technology which includes a dual fluidized-bed process that uses superheated steam,

carbon, and other additives to convert the SBW into a solid, granular treatment product that is packaged into canisters suitable for ultimate disposal. The system is designed to operate with a liquid feed rate that will not exceed 3.5 gallons per minute. The process is named the Integrated Waste Treatment Unit because two fluidized-bed steam reformers, the Denitration and Mineralization Reformer (DMR) and the Carbon Reduction Reformer (CRR), are integrated into a single treatment process with a common air pollution control system. The DMR, CRR and material transfer and loadout systems utilize filters that are integral to the processing system used to capture and package the solid treatment product; these filters are not part of the air pollution control system. The IWTU air pollution control system includes the Process HEPA Filter System (which is located downstream from the DMR and CRR).

[PTC No. P-2008.0199, 8/31/09]

## **Emissions Control Description**

**Table 5.2 IWTU CONTROL DESCRIPTION**

| Emissions Unit(s) / Process(es)  | Emissions Control Device   | Emissions Point   |
|--|----------------------------|---|
| IWTU consists of : <ul style="list-style-type: none"> <li>• Denitration and Mineralization Reformer (DMR), Carbon Reduction Reformer (CRR)</li> <li>• Treatment Product Transfer and Loadout System</li> </ul> | Process HEPA Filter System | IWTU stack: 120 ft height; 5 ft exit diameter; 144°F exit temperature, and 59 ft/second estimated exit velocity |

[PTC No. P-2008.0199, 8/31/09]

## **Permit Limits/Standard Summary**

### **Emissions Limits**

#### **5.2.1 NO<sub>x</sub> Emissions Limit**

The NO<sub>x</sub> emissions increase from the IWTU project shall not exceed 39.4 tons per any consecutive 12-month period.

[PTC No. P-2008.0199, 8/31/09]

### **Operating Requirements**

#### **5.2.2 Throughput Limit**

The throughput rate of liquid waste fed into the IWTU shall not exceed 1,114,000 gallons per any consecutive 12-calendar month period.

[PTC No. P-2008.0199, 8/31/09]

## **Monitoring, Recordkeeping, and Reporting Requirements**

#### **5.2.3 NO<sub>x</sub> Performance Test**

Within 60 days of achieving the maximum production rate of the IWTU, but not later than 180 days after initial startup of the source, the permittee shall conduct a performance test to measure NO<sub>x</sub> emissions from the IWTU stack to demonstrate compliance with the NO<sub>x</sub> emission limit in Permit Condition 5.2.1. The test may be performed before radioactive material is introduced into the IWTU using surrogate liquid feed (not radioactive) that is representative of the actual mixed waste liquid that will be processed by the IWTU. The test shall be conducted in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 7E, or a DEQ-approved alternative. The test shall be performed in accordance with IDAPA 58.01.01.157 and Section 2 of this permit regarding performance testing. In addition, the following actions shall be taken during each performance test run and reported in the performance test report:

- The IWTU shall be operated at the worst case normal production rate during the performance test. A description of how this requirement was met shall be included in the performance test report.
- Visible emissions shall be observed and recorded using the methods specified in IDAPA 58.01.01.625.
- The processing rate of the IWTU shall be recorded in units of gallons per minute of waste fed into the unit.

[PTC No. P-2008.0199, 8/31/09]

5.2.4 The total gallons of liquid waste fed into the IWTU shall be monitored and recorded on a monthly basis in units of gallons per month and gallons per consecutive 12 month period (gal/yr). All records shall be maintained on site in accordance with Permit Condition 2.22.

[IDAPA 58.01.01.322.06, 07, 5/1/94, PTC No. P-2008.0199, 8/31/09]

5.2.5 **Monitoring NO<sub>x</sub> emissions increase of the IWTU project**

Prior to initial startup of the source, the permittee shall have developed and obtained DEQ's approval of a monitoring method to be used to demonstrate compliance with Permit Condition 5.2.1. The method shall require the permittee to monitor and record the following for each calendar month:

- Monthly boilers NO<sub>x</sub> emissions increase caused by the IWTU operation
- Monthly NO<sub>x</sub> emissions from the IWTU stack
- The monthly sum of these two emissions increase
- Using the monthly sum of these two emissions, calculate and record the NO<sub>x</sub> emissions for the IWTU project for each consecutive 12-month period.

[PTC No. P-2008.0199, 8/31/09]

**5.3 COM-UTI-616 Air Compressor at INTEC**

**Summary Description**

The backup air compressor (COM-UTI-616) is rated at 460 horsepower at 1800 rpm and was manufactured in February of 1997. The air compressor supplies filtered air at 115 psig to the compressed air system when electric power is not available to the normal standby air compressors and is located outside CPP-616 in the southeast corner of the CPP-606. It is a portable rotary screw, oil flooded compressor manufactured by Ingersoll-Rand, and model number is XP-1400WCU. The compressed air capacity is 1,400 scfm at 115 psig. The backup compressor (COM-UTI-616) is powered by Cummins diesel fueled internal combustion engine.

[PTC No. P-2007.0076, 9/12/07]

**Permit Limits/Standard Summary**

**Emissions Limits**

5.3.1 **NO<sub>x</sub> Emissions Limit**

The NO<sub>x</sub> emissions from the standby air compressor stack shall not exceed 35.65 T/yr.

[PTC No. P-2007.0076, 9/12/07]

**Operating Requirements**

5.3.2 Operating Limits

- The maximum hours of operation of the backup internal combustion engine shall not exceed 5,000 hours per any consecutive 12- calendar month period.
- The permittee shall install, maintain, and operate a device to measure the operational hours of the backup internal combustion engine, COM-UTI-616.

[PTC No. P-2007.0076, 9/12/07]

**Monitoring, Recordkeeping, and Reporting Requirements**

5.3.3 Operational Hours Monitoring

- The permittee shall monitor and record the operational hours of the backup internal combustion engine (COM-UTI-616) monthly and annually. The annual operational hours shall be determined by adding the monthly operational hours for the previous consecutive 12-calendar month period. All records shall be maintained on site in accordance with Permit Condition 2.22.

[IDAPA 58.01.01.322.06, 07, 5/1/94, PTC No. P-2007.0076, 9/12/07]

**5.4 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – 40 CFR 63 Subpart ZZZZ – Non-Emergency COM-UTI-616 Air Compressor at INTEC**

Within the context of 40 CFR 63 Subpart ZZZZ, the terms “you” and “your” mean “permittee” and “permittee’s” respectively.

The following conditions in 5.4, in addition to those listed for non-emergency stationary RICE in permit condition 2.18, are applicable only to the engine for the COM-UTI-616 Air Compressor at INTEC. COM-UTI-616 is a 460 HP existing non-emergency CI stationary RICE.

The compliance date for this existing non-emergency CI stationary RICE is May 3, 2013 as specified in §63.6595.

[40 CFR 63.6590, 40 CFR 63.6595]

5.4.1 40 CFR 63.6602 - Emission Limitations for Existing Stationary CI RICE with a Site rating of Equal to or Less than 500 Brake HP

The permittee shall comply with the emissions limitations listed in Table 5.4 (Table 2c to Subpart ZZZZ of Part 63).

Compliance with the numerical emission limitations listed in Table 5.4 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 Subpart ZZZZ.

**Table 5.4 SUMMARY OF EMISSION LIMITATIONS FOR EXISTING COM-UTI-616<sup>1</sup>**

| For each . . .   | You must meet the following requirement, except during periods of startup . . .  | During periods of startup you must . . .  |
|--|--|---|
| 4. Non-Emergency, non-black start CI stationary RICE 300 < HP ≤ 500. | a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or<br>b. Reduce CO emissions by 70 percent or more. | 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. <sup>2</sup> |

1. Table 5.4 is from Table 2c to Subpart ZZZZ edited to include only those engine categories applicable to this source.
2. Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices in accordance with Table 2c to Subpart ZZZZ footnote 1.

[40 CFR 63.6602]

#### 5.4.2 **40 CFR 63.6604 – Fuel Requirements for Existing Stationary CI RICE**

Beginning May 3, 2013 the permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel in the COM-UTI-616 air compressor engine.

- (1) Sulfur content.
  - (i) 15 ppm maximum.
- (2) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.

[40 CFR 63.6604]

#### 5.4.3 **40 CFR 63.6605 – General Requirements for Complying with Subpart ZZZZ**

- The permittee must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the affected source at all times, in accordance with 40 CFR 63.6605(a).
- At all times the permittee must operate and maintain the 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, in accordance with 40 CFR 63.6605(b).

[40 CFR 63.6605]

#### 5.4.4 **40 CFR 63.6612 – Dates of Initial Performance Tests or Other Compliance Demonstrations for an Existing Stationary CI RICE Less Than or Equal to 500 Brake HP**

This source is subject to the following testing requirements:

- The permittee must conduct the initial performance test not later than October 30, 2013 (180 days after the compliance date of May 3, 2013), in accordance with 40 CFR 63.6612(a).
- The permittee must conduct any initial performance test(s) or other initial compliance demonstration according to Tables 4 to Subpart ZZZZ and 5 to Subpart ZZZZ (Table 5.5) and according to provisions in Subpart A §63.7, pursuant to 40 CFR 63.6612.
- The permittee shall conduct any initial performance test in accordance with Permit Condition 5.4.6.

[40 CFR 63.6612]

#### 5.4.5 **40 CFR 63.6615 – Subsequent Performance Tests**

In accordance with 40 CFR 63.6615 and Table 3 to Subpart ZZZZ no subsequent performance tests is required for existing non-emergency CI stationary RICE that are less than or equal to 500 HP.

[40 CFR 63.6615]

#### 5.4.6 **40 CFR 63.6620 – Performance Tests Requirements**

- The permittee must conduct each applicable performance test as specified in 40 CFR 63 Subpart ZZZZ Table 4 and 40 CFR 63.6620(a).

- The permittee shall submit a site-specific test plan (performance test protocol) for review by the Department in accordance with Section 2 of Facility-Wide Conditions (Performance Testing) and 40 CFR §63.7.

[40 CFR 63.6620]

5.4.7 **40 CFR 63.6625 – Monitoring, Installation, Collection, Operation, and Maintenance**

- 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 §63.6625(g). 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. The permittee shall comply with following:
  - Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
  - 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.
- 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 Table 5.4 (Table 2c to Subpart ZZZZ of Part 63), pursuant to 40 CFR 63.6625(h).

[40 CFR 63.6625]

5.4.8 **40 CFR 63.6630 – Demonstration of Initial Compliance with the Emission Limitations and Operating Limitations**

- In accordance with 40 CFR 63.6630(a), the permittee must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5.5 (Table 5 to Subpart ZZZZ of Part 63) below.
- In accordance with 40 CFR 63.6630(c), the permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

[40 CFR 63.6630]

**Table 5.5 SUMMARY OF INITIAL COMPLIANCE REQUIREMENTS FOR COM-UTI-616 <sup>1</sup>**

| For each . . .  | Complying with the requirement to . . .                                      | You have demonstrated initial compliance if . . .  |
|---|--|--|
| 12. Existing non-emergency stationary RICE 100 ≤ HP ≤ 500 located at a major source of HAP. | Reduce CO or formaldehyde emissions...                                       | i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.           |
| 13. Existing non-emergency stationary RICE 100 ≤ HP ≤ 500 located at a major source of HAP. | Limit the concentration of formaldehyde or CO in the stationary RICE exhaust | i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable. |

1. This table is Table 5 to Subpart ZZZZ edited to include only those engine categories applicable to this source.

[40 CFR 63.6630]

5.4.9 **40 CFR 63.6640 – Continuous Compliance with Emission Limitations and Operating Limitations**

- The COM-UTI-616 stationary RICE is not subject to any of the continuous compliance methods specified in Table 6 to Subpart ZZZZ of Part 63.

- In accordance with 40 CFR 63.6640(b) and (e) unless otherwise exempted by Subpart ZZZZ, the permittee must report each instance in which you did not meet each emission limitation or operating limitation, or requirements in Table 5.4 and Table 8 to Subpart ZZZZ of Part 63 that apply to you. These instances are deviations from the emission and operating limitations in Subpart ZZZZ and the requirements of Subpart A. Deviation applicability is determined in accordance with §63.6640 and must be reported according to the requirements in §63.6650 and Table 5.6 (Table 7 to Subpart ZZZZ of Part 63).
- Monitoring and collection of data to demonstrate continuous compliance shall be performed in accordance with §63.6635.

[40 CFR 63.6640]

#### 5.4.10 **40 CFR 63.6645 – Notification Requirements**

The permittee must submit all of the applicable notifications in §§63.7(b)(1) and 63.9(b)(2) by the dates specified in §63.6645.

##### **Notification & Reporting Address**

Any notifications or reporting required by 40 CFR 63, Subpart ZZZZ or Subpart A – General Provisions shall be submitted to the addresses listed in the Reports and Certification permit conditions of the Section 2 Facility-Wide Conditions, in accordance with 40 CFR 63.13.

[40 CFR 63.6645]

#### 5.4.11 **40 CFR 63.6650 – Reporting Requirements**

- In accordance with 40 CFR 63.6650(a), the permittee must submit each report in Table 5.6 below (Table 7 to Subpart ZZZZ of Part 63) that applies to you.
- In accordance with 40 CFR 63.6650(a), unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee must submit each report by the date in Table 5.6 (Table 7 to Subpart ZZZZ of Part 63) and according to the requirements in paragraphs (b)(1) through (b)(9) of section §63.6650.
  - In accordance with 40 CFR 63.6650(b)(5), the permittee may submit the required semiannual compliance reports by February 28 or August 31 for the respective preceding calendar half for any affected source that had a compliance date in the calendar half or any preceding calendar half. In accordance with §63.6650(f), §63.10(a)(5), and §63.10(a)(7); this report may be submitted with the semiannual report required by this permit's Section 24 General Provisions Semiannual Monitoring Reports requirement and shall be deemed to satisfy any obligation to report by Subpart ZZZZ provided the report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ.
  - In accordance with 40 CFR 63.6650(b)(5), the permittee may submit the required annual compliance reports by February 28 for the respective preceding calendar year for any affected source that had a compliance date in the calendar year or any preceding calendar year. In accordance with §63.6650(f), §63.10(a)(5), and §63.10(a)(7); this report may be submitted with the Periodic Compliance Certification required by this permit's Section 21 General Provisions Periodic Compliance Certification requirement and shall be deemed to satisfy any obligation to report by Subpart ZZZZ provided the report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ.
  - In accordance with 40 CFR 63.6650(c), the compliance report must contain the information required in §63.6650(c)-(e).

[40 CFR 63.6650]

**Table 5.6 SUMMARY OF REPORTING REQUIREMENTS FOR COM-UTI-616<sup>1</sup>**

| For each ...  | You must submit a ...   | The report must contain ...  | You must submit the report ...  |
|---|-------------------------|--|---|
| 1. Existing non-emergency, non-black start stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP | 1. Compliance report... | 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 40 CFR 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or | 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<br>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. |
|   |                         | b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was-out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or   | i. Semiannually according to the requirements in §63.66509b).   |
|   |                         | c. If you had a malfunction during the reporting period, the information in 40 CFR 63.6650(c)(4).  | i. Semiannually according to the requirements in §63.6650(b).   |

1. This table is Table 7 to Subpart ZZZZ edited to include only those engine categories applicable to this source.

**[40 CFR 63.6611, 40 CFR 66.50]**

**5.4.11 40 CFR 63.6655 – Recordkeeping Requirements**

- (a) In accordance with 40 CFR 63.6655(a), if the permittee must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5) and (b)(1) through (b)(3) of section §63.6655.
  - (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.

5.4.12 **40 CFR 63.6660 – Form and Duration of Records**

The permittee must keep all records in accordance with Section 2 of Facility-Wide Conditions Monitoring and Recordkeeping of this permit and in accordance with 40 CFR 63.6660.

[40 CFR 63.6660]

5.4.13 **40 CFR 63.6665 – NESHAP 40 CFR 63, Subpart A – General Provisions**

The permittee shall comply with the applicable general provisions in Table 8 to 40 CFR 63, Subpart ZZZZ in accordance with 40 CFR 63.6665.

The permittee shall comply with the requirements of 40 CFR 63 Subpart A – General Provisions.

[40 CFR 63.6611, 40 CFR 66.6665, 40 CFR 63 Subpart A]

## **6. CRITICAL INFRASTRUCTURE TEST RANGE COMPLEX (CITRC)**

### **Summary Description**

The only requirements that apply to the CITRC are in the facility-wide conditions located in Section 2 of this permit.

## **7. NAVAL REACTORS FACILITY (NRF)**

### **Summary Description**

The only requirements that apply to the NRF are in the facility-wide conditions located in Section 2 of this permit.

## 8. TEST AREA NORTH (TAN)

### Summary Description

The following is a narrative description of the permitted emissions units at Test Area North (TAN) regulated in this Tier I operating permit. This description is for informational purposes only.

Test Area North is in the northern part of the INL site and primarily consists of the Specific Manufacturing Capability (SMC) facility, along with a fire station and vehicle fueling station. A private contractor operates TAN on behalf of DOE-ID.

The SMC is a state-of-the-art research and manufacturing complex. The SMC includes a multiphased manufacturing operation that produces fabricated metal assemblies. Radionuclide emissions from SMC are generally limited to those present in depleted uranium. The SMC project supports two major process areas: (a) TAN 629 Fabrication and Assembly; and (b) TAN 679 Rolling Operations. The SMC utilizes three boilers. TAN 679-067a and TAN 679-068 are 25 MMBtu/hr boilers and TAN 679-067b is a 60 horsepower (i.e., 2 MMBtu/hr) boiler.

It is noted that when DEQ requests classified records, the records shall be made available only to DEQ representatives with appropriate national security clearances and a need to know, in accordance with federal regulations. Table 8.1 contains a summary of the requirements that apply to TAN, and specific permit requirements are listed below the Table.

**Table 8.1 SUMMARY OF APPLICABLE REQUIREMENTS**

| Permit Conditions | Parameter  | Permit Limit / Standard Summary   | Applicable Requirements Reference | Monitoring and Recordkeeping Requirements |
|-------------------|--|---|-----------------------------------|---|
| 8.1.1             | SO <sub>2</sub><br>NO <sub>x</sub><br>From SMC boilers | SO <sub>2</sub> - 19.83 lb/hr, 79.33 T/yr<br>NO <sub>x</sub> - 5.53 lb/hr, 22.13 T/yr | PTC No. P-2011.0092               | 8.1.2, 8.1.3, 8.1.4                       |
| 8.1.2             | Boiler fuel requirements                               | Combust only distillate oil, LPG or natural gas in the SMC boilers                    | PTC No. P-2011.0092               | 8.1.3                                     |
| 8.2.1             | VOC emissions from TAN 629-012 and TAN 629-014         | Not to exceed 4.1 T/yr  | PTC No. 2011.0092                 | 8.2.2, 8.2.3                              |

### Permit Limits/Standard Summary

#### 8.1 SMC Boilers

#### Emissions Limits

- 8.1.1 The combined emissions of SO<sub>2</sub> and NO<sub>x</sub> the three SMC boilers that vent to stacks TAN 679-067a, TAN 679-067b and TAN 679-068 shall not exceed any emissions rate limit in the following table.

**COMBINED BOILER EMISSION LIMITS<sup>a</sup>**

| Emissions Units   | SO <sub>2</sub>    |                   | NO <sub>x</sub>    |                   |
|---|--------------------|-------------------|--------------------|-------------------|
|   | lb/hr <sup>b</sup> | T/yr <sup>c</sup> | lb/hr <sup>b</sup> | T/yr <sup>c</sup> |
| Combined Emissions From Boilers TAN 679-067a (25 MMBtu/hr), TAN 679-067b (60 Horsepower), and TAN 679-068 (25 MMBtu/hr) | 19.8               | 79.3              | 5.53               | 22.1              |

<sup>a</sup> In absence of any other credible evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring, and recordkeeping requirements.

<sup>b</sup> Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ approved alternative.

<sup>c</sup> Tons per any consecutive 12-month period.

[PTC No. P-2011.0092, 10/18/11]

## Operating Requirements

- 8.1.2 Only distillate fuel oil, liquefied petroleum gas (LPG), or natural gas shall be combusted in the three SMC Boilers: TAN 679-067a (25 MMBtu/hr), TAN 679-067b (60 Horsepower), and TAN 679-068 (25 MMBtu/hr).

[PTC No. P-2011.0092, 10/18/11]

## Monitoring, Recordkeeping and Reporting Requirements

- 8.1.3 When the SMC facility is operating, the permittee shall monitor and record the monthly and consecutive 12-month period fuel consumption and type of fuel combusted by the three boilers that vent to stacks TAN 679-067a, TAN 679-067b and TAN 679-068. All records shall be maintained in accordance with Permit Condition 2.22.

[PTC No. P-2011.0092, 10/18/11]

- 8.1.4 Each month the permittee shall calculate and record the average pounds per hour per month SO<sub>2</sub> and NO<sub>x</sub> emissions and the SO<sub>2</sub> and NO<sub>x</sub> emissions per consecutive 12-month period from the three boilers that vent to stacks TAN 679-067a, TAN 679-067b and TAN 679-068 using appropriate EPA AP-42 or manufacturer supplied emissions factors, or a DEQ approved alternative method. All records shall be maintained in accordance with permit condition Permit Condition 2.22.

[PTC No. P-2011.0092, 10/18/11]

## 8.2 SMC, TAN 629: Phase I - 2B Paint Process

### Emissions Limits

- 8.2.1 Emissions of VOC from the 2B Paint Process that vent to stacks TAN 629-012 and TAN 629-014 shall not exceed 4.1 tons per any consecutive 12-month period.

In absence of any other credible evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring, and recordkeeping requirements.

[PTC No. P-2011.0092, 10/18/11]

## Monitoring, Recordkeeping and Reporting Requirements

- 8.2.2 The permittee shall maintain a record of either one or the other of the following types of painting production information. The records shall be maintained in accordance with Permit Condition 2.22:
- the number of parts processed during the previous consecutive 12 months at the 2B Paint Process (i.e., that vent to stacks TAN 629-012 and TAN 629-014), or;
  - the quantity of each material used in the 2B Paint Process, including but not limited to pre-treatment wash primer, primer, topcoat, clear coat, catalyst, activator, hardener, and thinner/reducer.

[PTC No. P-2011.0092, 10/18/11]

- 8.2.3 Using the painting production records, each month the permittee shall calculate and record the VOC emissions per consecutive 12-month period from the 2B Paint Process that vent to stacks TAN 629-012 and TAN 629-014. All records shall be maintained in accordance with permit condition Permit Condition 2.22.

[PTC No. P-2011.0092, 10/18/11]

## 9. ADVANCED TEST REACTOR COMPLEX (ATR COMPLEX)

### 9.1 ATR Complex – Diesel Powered Generators

#### Summary Description

Advanced Test Reactor Complex (ATR Complex) utilizes three electrical generator units (Units 674-M-6, 670-M-42, and 670-M-43) powered by large stationary diesel engines. The primary purpose of the ATR Complex generators is to provide electrical power to the Advanced Test Reactor Complex during normal operations, off-normal operations, and emergency operation.

In addition to the facility-wide conditions listed in Section 2 of this permit, Table 9.1 contains a summary of the additional requirements that apply to the ATR Complex.

**Table 9.1 APPLICABLE REQUIREMENTS SUMMARY**

| Permit Conditions | Parameter                                     | Permit Limit / Standard Summary  | Applicable Requirements Reference | Monitoring and Recordkeeping Requirements |
|-------------------|---|--|-----------------------------------|---|
| 9.1.1             | NO <sub>x</sub> emissions from the generators | Table 9.2 establishes annual NO <sub>x</sub> emissions limits                                | PTC No. P-000534                  | 9.1.5                                     |
| 9.1.2             | Fuel oil                                      | Combust only ASTM grade number 1 and/or 2 fuel oils in the generators                        | PTC No. P-000534                  | 9.1.7                                     |
| 9.1.3             | Fuel oil consumption                          | Not to exceed 544,522 gallons per any consecutive 12-month period                            | PTC No. P-000534                  | 9.1.5                                     |
| 9.1.4             | Fuel sulfur content                           | Not to exceed 0.3 weight % for No. 1 fuel oil, not to exceed 0.5 weight % for No. 2 fuel oil | PTC No. P-000534                  | 9.1.6                                     |

#### Emissions Limits

9.1.1 The combined NO<sub>x</sub> emissions from the 674-M-6, 670-M-42, and 670-M-43 generator stacks shall not exceed the emissions rate limit listed in Table 9.2 in any consecutive 12-month period.

**Table 9.2 ATR COMPLEX GENERATORS EMISSIONS LIMIT**

| Source Description                          | NO <sub>x</sub> |
|---|-----------------|
|   | T/yr            |
| Combined Emissions – ATR Complex Generators | 119.5           |

[PTC No. P-000534, 5/18/04]

#### Operating Limits

9.1.2 The permittee shall only combust ASTM Grade 1 and/or Grade 2-distillate fuel oil (diesel fuel) in the three generators.

[PTC No. P-000534, 5/18/04]

9.1.3 The maximum annual combined throughput of fuel oil to the 674-M-6, 670-M-42, and 670-M-43 generators shall not exceed 544,522 gallons per any consecutive 12-month period.

[PTC No. P-000534, 5/18/04]

9.1.4 The sulfur content in the No. 1 fuel oil (ASTM Grade 1) supplied to the three generators shall not exceed 0.3% by weight as required in IDAPA 58.01.01.728.

The sulfur content in the No. 2 fuel oil (ASTM Grade 2) supplied to the three generators shall not exceed 0.5% by weight as required in IDAPA 58.01.01.728.

[PTC No. P-000534, 5/18/04]

**Monitoring, Recordkeeping, and Reporting Requirements**

9.1.5 For each month, the permittee shall monitor and record the aggregate throughput of fuel oil to generators 674-M-6, 670-M-42, and 670-M-43 for that month and for the most recent consecutive 12-month period. All records shall be maintained on site in accordance with Permit Condition 2.22.  
[IDAPA 58.01.01.322.06, 07, 5/1/94, PTC No. P-000534, 5/18/04]

9.1.6 The permittee shall follow the procedures specified in Permit Condition 2.10.1 to verify that the sulfur content of the fuels do not exceed the levels specified in Permit Condition 9.1.4.  
[IDAPA 58.01.01.322.06, 07, 5/1/94]

9.1.7 The permittee shall maintain records of fuel type as delivered for use in the engine. All records shall be maintained on site in accordance with Permit Condition 2.22.  
[IDAPA 58.01.01.322.06, 07, 5/1/94]

**9.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – 40 CFR 63 Subpart ZZZZ – Non-Emergency Generators, TRA-674-M-6, TRA-670-M-42, and TRA-670-M-43 at ATR Complex**

Within the context of 40 CFR 63 Subpart ZZZZ, the terms “you” and “your” mean “permittee” and “permittee’s” respectively.

The following conditions in 9.2, in addition to those listed for non-emergency CI stationary RICE in permit condition 2.18, are applicable only to the engines TRA-674-M-6 (2132 HP), TRA-670-M-42 (2118 HP) and TRA-670-M-43 (2118 HP) at the ATR Complex, unless otherwise noted. These engines are for non-emergency generators.

The compliance date for these existing non-emergency CI stationary RICE is May 3, 2013 as specified in §63.6595.

[40 CFR 63.6590, 40 CFR 63.6595]

**9.2.1 40 CFR 63.6600 – Emission and Operating Limitations for Stationary RICE with a Site rating of More than 500 Brake HP**

The permittee shall comply with the emissions limitations and operating limitations listed in Table 9.3 (Table 2b to Subpart ZZZZ of Part 63) and Table 9.4 (Table 2c to Subpart ZZZZ of Part 63).

Compliance with the numerical emission limitations listed in Table 9.4 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 Subpart ZZZZ of Part 63.

**Table 9.3 SUMMARY OF OPERATING LIMITATIONS FOR TRA-674-M-6, TRA-670-M-42 AND TRA-670-M-43 <sup>1</sup>**

| For each ...  | You must meet the following operating limitation....   |
|---|--|
| 1. CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst | a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and<br>b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is |

greater than or equal to 450 °F and less than or equal to 1350 °F.<sup>2</sup>

1. Table 9.3 is Table 2b to Subpart ZZZZ edited to include only those engine categories applicable to these sources and the emissions standard and emissions control method chosen by the permittee.
2. Sources can petition the Administrator pursuant to requirements of 40 CFR 63.8(g) for a different temperature range in accordance with Table 2b to Subpart ZZZZ footnote 1.

[40 CFR 63.6600]

**Table 9.4 SUMMARY OF EMISSION LIMITATIONS FOR TRA-674-M-6, TRA-670-M-42 AND TRA-670-M-43<sup>1</sup>**

| For each ...   | You must meet the following requirement, except during periods of startup ... | During periods of startup you must ...  |
|--|---|---|
| 5. Non-Emergency, non-black start stationary CI RICE > 500 HP. | b. Reduce CO emissions by 70 percent or more.                                 | 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. <sup>2</sup> |

1. Table 9.4 is Table 2c to Subpart ZZZZ edited to include only those engine categories applicable to these sources and the emissions standard chosen by the permittee.
2. Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices in accordance with Table 2c to Subpart ZZZZ footnote 3.

[40 CFR 63.6600]

#### 9.2.2 **40 CFR 63.6604 – Fuel Requirements for Existing Stationary CI RICE**

Beginning May 3, 2013, for engine 674-M-6 only, the permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) (§63.6604 is applicable to existing non-emergency non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder. Engines 670-M-42 and 670-M-43 have displacements greater than 30 liters per cylinder):

- (1) Sulfur content.
  - (i) 15 ppm maximum.
- (2) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.

[40 CFR 63.6604]

#### 9.2.3 **40 CFR 63.6605 – General Requirements for Complying with Subpart ZZZZ**

- In accordance with 40 CFR 63.6605(a), the permittee must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the affected sources at all times.
- In accordance with 40 CFR 63.6605(b), the permittee must operate and maintain the affected sources, 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.

[40 CFR 63.6605]

#### 9.2.4 **40 CFR 63.6610 – Testing and Initial Compliance Requirements for Existing Non-emergency Stationary CI RICE with a Site Rating of More Than 500 Brake HP**

The permittee is subject to the following initial performance test requirements that apply to existing non-emergency stationary RICE with a site rating of more than 500 brake HP:

- In accordance with 40 CFR 63.6610(a), the permittee must conduct any initial performance test(s) not later than October 30, 2013 (180 days after the compliance date of May 3, 2013.)
- In accordance with 40 CFR 63.6610(a), the initial performance test shall be conducted in accordance with Table 4 to Subpart ZZZZ, and the provisions of Subpart A §63.7.
- The permittee shall conduct any initial performance test(s) in accordance with permit condition 9.2.6.

[40 CFR 63.6610, 40 CFR 63.6612]

**9.2.5 40 CFR 63.6615 – Subsequent Performance Tests**

If the permittee must comply with the emission limitations and operating limitations, the subsequent performance tests must be conducted as specified in Table 9.5 (Table 3 to Subpart ZZZZ of Part 63).

**Table 9.5 SUMMARY OF SUBSEQUENT PERFORMANCE TEST REQUIREMENTS FOR TRA-674-M-6, TRA-670-M-42 AND TRA-670-M-43<sup>1</sup>**

| For each ...   | Complying with the requirement to ... | You must ...  |
|--|---------------------------------------|---|
| 4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are not limited use stationary RICE | Reduce CO emissions.                  | Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first. |

1. Table 9.5 is Table 3 to Subpart ZZZZ edited to include only those engine categories applicable to these sources and the emissions standard chosen by the permittee.

**9.2.6 40 CFR 63.6620 – Performance Tests Requirements**

- In accordance with 40 CFR 63.6620(a), the permittee must conduct each applicable performance test as specified in 40 CFR 63 Subpart ZZZZ Tables 3 and 4.
- The permittee shall submit a site-specific test plan (performance test protocol) for review by the Department in accordance with Section 2 of Facility-Wide Conditions (Performance Testing) and 40 CFR §63.7.

[40 CFR 63.6620]

**9.2.7 40 CFR 63.6625 – Monitoring, Installation, Collection, Operation, and Maintenance**

- If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 9.6, (Table 5 to Subpart ZZZZ of Part 63) you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of §40 CFR 63.6625(b).
- 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 section 40 CFR 63.6625(g). 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.
- 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 Table 9.4 (Table 2c to Subpart ZZZZ of Part 63) apply. In accordance with Table 2c to Subpart ZZZZ of Part 63 sources can petition the Administrator for alternative work practices, pursuant to the requirements of 40 CFR 63.6(g).

9.2.8 **40 CFR 63.6630 – Demonstration of Initial Compliance with the Emission Limitations and Operating Limitations**

- In accordance with 40 CFR 63.6630(a), the permittee must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 9.6 (Table 5 to Subpart ZZZZ of Part 63) below.
- In accordance with 40 CFR 63.6630(b), during the initial performance test, the permittee must establish each operating limitation in Table 9.3 (Table 2b to Subpart ZZZZ of Part 63) that applies to you.
- In accordance with 40 CFR 63.6630(c), the permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

[40 CFR 63.6630]

**Table 9.6 SUMMARY OF INITIAL COMPLIANCE REQUIREMENTS FOR TRA-674-M-6, TRA-670-M-42 AND TRA-670-M-43<sup>1</sup>**

| For each...   | Complying with the requirement to...                                | You have demonstrated initial compliance if...  |
|---|---|---|
| 1. Non-emergency stationary CI RICE > 500 HP located at a major source of HAP | 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<br>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and<br>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |

1. Table 5 to Subpart ZZZZ is edited to include only those engine categories applicable to these sources and the emissions standard and emissions control chosen by the permittee.

[40 CFR 63.6630]

9.2.9 **40 CFR 63.6635 – Monitoring and Collecting Data to Demonstrate Continuous Compliance**

Monitoring and collection of data to demonstrate continuous compliance shall be performed in accordance with §63.6635(a), (b), and (c).

[40 CFR 63.6635]

9.2.10 **40 CFR 63.6640 – Continuous Compliance with Emission Limitations and Operating Limitations**

- In accordance with 40 CFR 63.6640(a), the permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 9.3 (Table 2b to Subpart ZZZZ of Part 63) and 9.4 (Table 2c to Subpart ZZZZ of Part 63) that apply to you according to methods specified in Table 9.7 (Table 6 to Subpart ZZZZ of Part 63) below.
- In accordance with 40 CFR 63.6640(b), unless otherwise exempted by Subpart ZZZZ, the permittee must report each instance in which you did not meet each emission limitation or operating limitation, or requirements in Tables 9.3, 9.4 and Table 8 to Subpart ZZZZ of Part 63 that apply to you. These instances are deviations from the emission and operating limitations in Subpart ZZZZ and the requirements of Subpart A of Part 63. Deviation applicability is determined in accordance with §63.6640 and must be reported according to the requirements in §63.6650 and Table 9.8 (Table 7 to Subpart ZZZZ of Part 63).
- In accordance with 40 CFR 63.6640(b), 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.

**Table 9.7 SUMMARY OF CONTINUOUS COMPLIANCE REQUIREMENTS FOR TRA-674-M-6, TRA-670-M-6 AND TRA-670-M-43<sup>1</sup>**

| For each . . .   | Complying with the requirement to . . .   | You must demonstrate continuous compliance by . . .   |
|--|---|---|
| 10. Existing stationary CI RICE > 500 HP that are not limited use stationary RICE, | Reduce CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR, | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO, as appropriate, to demonstrate that the required CO, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO concentration limit; and<br><br>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and<br><br>iii. Reducing these data to 4-hour rolling averages; and<br><br>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;<br><br>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |

1. Table 9.7 is Table 6 of Subpart ZZZZ edited to include only those engine categories applicable to these sources and the emissions standard and emissions control chosen by the permittee.

**[40 CFR 63.6640]**

**9.2.11 40 CFR 63.6645 – Notification Requirements**

The permittee must submit all of the applicable 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 in §63.6645.

**Notification & Reporting Address**

Any notifications or reporting required by 40 CFR 63, Subpart ZZZZ or Subpart A – General Provisions shall be submitted to the addresses listed in the Reports and Certifications permit conditions of the Section 2 Facility-Wide Conditions, in accordance with 40 CFR 63.13.

**[40 CFR 63.6645]**

**9.2.12 40 CFR 63.6650 – Reporting Requirements**

- In accordance with 40 CFR 63.6650(a), the permittee must submit each report in Table 9.8 (Table 7 to Subpart ZZZZ of Part 63) that applies to you.
- Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee must submit each report by the date in Table 9.8 (Table 7 to Subpart ZZZZ of Part 63) and according to the requirements in paragraphs (b)(1) through (b)(9) of section §63.6650.
- In accordance with 40 CFR 63.6650(b)(5), the permittee may submit the required semiannual compliance reports by February 28 or August 31 for the respective preceding calendar half for any affected source that had a compliance date in the calendar half or any preceding calendar half. In accordance with §63.6650(f), §63.10(a)(5), and §63.10(a)(7); this report may be submitted with the semiannual report required by this permit’s Section 24 General Provisions requirement for Semiannual Monitoring Reports and shall be deemed to satisfy any obligation to report by Subpart ZZZZ provided the report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ.
- In accordance with §63.6650(b)(5), the permittee may submit the required annual compliance reports by February 28 for the respective preceding calendar year for any affected source that had a compliance date in the calendar year or any preceding calendar year. In accordance with

§63.6650(f), §63.10(a)(5), and §63.10(a)(7); this report may be submitted with the Periodic Compliance Certification required by this permit's Section 21 General Provisions requirement for Periodic Compliance Certification and shall be deemed to satisfy any obligation to report by Subpart ZZZZ provided the report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ.

- The Compliance report must contain the information required in §63.6650(c)-(e).

**Table 9.8 SUMMARY OF REPORTING REQUIREMENTS FOR TRA-674-M-6, TRA-670-M-42 AND TRA-670-M-43<sup>1</sup>**

| For each ...   | You must submit a(n) ... | The report must contain ...  | You must submit the report ...  |
|--|--------------------------|--|---|
| 1. Existing non-emergency, non-black start stationary CI RICE > 500 HP located at a major source of HAP. | 1. Compliance report...  | 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 40 CFR 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or | 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<br>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. |
|  |                          | b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was-out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or   | i. Semiannually according to the requirements in §63.66509b).   |
|  |                          | c. If you had a malfunction during the reporting period, the information in 40 CFR 63.6650(c)(4).  | i. Semiannually according to the requirements in §63.6650(b).   |

1. Table 9.8 is Table 7 to Subpart ZZZZ edited to include only those engine categories applicable to this source.

**[40 CFR 63.6611, 40 CFR 6650]**

9.2.13 **40 CFR 63.6655 – Recordkeeping Requirements**

- In accordance with 40 CFR 63.6655(a), if the permittee 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 section §63.6655.
  - (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.
- In accordance with 40 CFR 63.6655(b), for each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section, if applicable.
  - (1) Records described in §63.10(b)(2)(vi) through (xi).
  - (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.
- In accordance with 40 CFR 63.6655(d), the permittee must keep the records required in Table 9.7 (Table 6 to Subpart ZZZZ of Part 63) to show continuous compliance with each emission or operating limitation that applies to you.

[40 CFR 63.6655]

9.2.14 **40 CFR 63.6660 – Form and Duration of 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 five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in a hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or records, according to §63.10(b)(1)

[40 CFR 63.6660]

9.2.15 **40 CFR 63.6665 – NESHAP 40 CFR 63, Subpart A – General Provisions**

The permittee shall comply with the applicable general provisions in Table 8 to 40 CFR 63, Subpart ZZZZ in accordance with 40 CFR 63.6665.

The permittee shall comply with the requirements of 40 CFR 63 Subpart A – General Provisions.

[40 CFR 63.6611, 40 CFR 66.6665, 40 CFR 63 Subpart A]

## **10. RADIOACTIVE WASTE MANAGEMENT COMPLEX (RWMC)**

### **Summary Description**

The only requirements that apply to the RWMC are in the facility-wide conditions located in Section 2 of this permit.

## 11. ADVANCED MIXED WASTE TREATMENT PROJECT (AMWTP)

### Summary Description

The AMWTP operates per the 1995 Settlement Agreement between the state of Idaho and the DOE. The settlement agreement directed DOE to ship the currently estimated 65,000 m<sup>3</sup> of TRU waste now located at INL to the WIPP or other such facility designated by DOE, by a target date of December 31, 2015, but no later than December 31, 2018. Much of this waste requires treatment before it will be accepted for disposal at the WIPP in New Mexico.

The AMWTP will treat mixed waste, TRU waste and alpha-emitting mixed low-level waste. The project includes:

- retrieving stored waste;
- characterizing the waste for storage, treatment, or disposal;
- storing the waste in preparation for treatment or pretreatment (as required);
- pretreating and/or treating the waste in the AMWTF (if necessary); and
- certifying the waste for shipment to WIPP or another waste management unit.

The overall AMWTP includes the AMWTF and the TSA-RE. The AMWTF is specific to the treatment building, along with other buildings and associated activities. The AMWTF is located at the RWMC on the southern portion of the 56-acre TSA. The waste that requires retrieval is located in the TSA-RE just west of the AMWTF. The TSA-RE encloses asphalt pads which support primarily earthen-covered stacks of retrievably stored mixed waste. Retrieval of waste at the TSA-RE is nearing completion.

Table 11.1 contains a summary of the requirements that apply to AMWTP, and specific permit requirements are listed below the Table.

**Table 11.1 SUMMARY OF APPLICABLE REQUIREMENTS**

| Permit Conditions | Parameter                            | Permit Limit / Standard Summary                 | Applicable Requirements Reference | Monitoring and Recordkeeping Requirements |
|-------------------|--------------------------------------|---|-----------------------------------|---|
| 11.1              | <b>TSA-RE</b>                        | Specified Sources = 33.4 T/yr                   | PTC No. P-2011.0109               | 11.5, 11.6                                |
|                   | NO <sub>x</sub> Emissions Limits     |   |                                   |   |
| 11.2              | Propane Heater                       | Combust propane only                            | PTC No. P-2011.0109               | 2.22                                      |
| 11.3              | Standby Generator Hours of Operation | 500 hours per any consecutive 12 month period   | PTC No. P-2011.0109               | 11.7                                      |
| 11.4              | Standby Generator Fuel usage rate    | 40 gallons per hour                             | PTC No. P-2011.0109               | 11.8                                      |
| 11.9              | <b>AMWTF</b>                         | Aggregate emissions from 3 boilers = 3.1 T/yr   | PTC No. 023-00001                 | 11.12                                     |
|                   | NO <sub>x</sub> emissions limit      |   |                                   |   |
| 11.10             | Boilers and water heater             | Combust propane exclusively                     | PTC No. 023-00001                 | 11.12                                     |
| 11.11             | Boilers                              | 322,084 gallons per consecutive 12-month period | PTC No. 023-00001                 | 11.12                                     |

### **Permit Limits/Standard Summary-TSA-RE**

### **Emissions Limits and Operating Requirements**

- 11.1 Nitrogen oxides (NO<sub>x</sub>) emissions from the mobile equipment operating within the RCE/ICE at the TSA-RE shall not exceed 33.4 tons per any consecutive 12-month period. The NO<sub>x</sub> limit applies to equipment used to move soil and retrieve/treat waste within the RCE/ICE at the TSA-RE.

The NO<sub>x</sub> limit does not apply to dump trucks, tugs, yard cranes, and other equipment that enters the RCE/ICE at the TSA-RE to move soil, retrieved waste, or other materials from the RCE/ICE to another location outside of the RCE/ICE. This permit condition no longer applies after retrieval of the existing waste containers, and the soil covering those waste containers, within the RCE/ICE has been completed.

In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and recordkeeping requirements

[PTC No. P-2011.0109, 9/19/11]

- 11.2 The permittee shall combust propane exclusively in the RCE/ICE heaters and make-up air units.

[PTC No. P-2011.0109, 9/19/11]

- 11.3 The maximum annual hours of operation of the standby generator shall not exceed 500 hours per any consecutive 12-month period.

[PTC No. P-2011.0109, 9/19/11]

- 11.4 The maximum hourly fuel consumption of the standby generator shall not exceed 40 gallons per hour.

[PTC No. P-2011.0109, 9/19/11]

### **Monitoring and Recordkeeping Requirements**

- 11.5 The permittee shall monitor and record on a monthly basis the hours of operation for each piece of equipment that operates inside the RCE/ICE of the TSA-RE.

This permit condition does not apply to dump trucks, tugs, yard cranes, and other equipment that enters the RCE/ICE at the TSA-RE to move soil, retrieved waste, or other materials from the RCE/ICE to another location outside of the RCE/ICE. This permit condition no longer applies after retrieval of the existing waste containers, and the soil covering those waste containers, within the RCE/ICE has been completed.

All records shall be maintained on site in accordance with Permit Condition 2.22.

[PTC No. P-2011.0109, 9/19/11]

- 11.6 The permittee shall calculate NO<sub>x</sub> emissions from the TSA-RE per consecutive 12-month period in the following manner:

- 11.6.1 On a monthly basis, for each piece of equipment operated within the TSA-RE as discussed in Permit Condition 11.1, the permittee shall multiply the hours of operation recorded in accordance with Permit Condition 11.5 by the horsepower rating for the equipment.

- 11.6.2 The permittee shall multiply the total from Permit Condition 11.6.1 by the appropriate emission factor. The emissions factor to be used is 0.031 pounds NO<sub>x</sub> per horsepower-hour or a DEQ approved alternative.

- 11.6.3 The permittee shall sum the NO<sub>x</sub> emissions from the previous consecutive 12-months.

- 11.6.4 This permit condition does not apply to dump trucks, tugs, yard cranes, and other equipment that enters the RCE/ICE at the TSA-RE to move soil, retrieved waste, or other materials from the RCE/ICE to another location outside of the RCE/ICE.

- 11.6.5 This permit condition no longer applies after retrieval of the existing waste containers, and the soil covering those waste containers, within the RCE/ICE has been completed.

All records shall be maintained on site in accordance with Permit Condition 2.22.

[PTC No. P-2011.0109, 9/19/11]

- 11.7 Each month, the permittee shall monitor and record the hours of operation of the standby generator for that month and for the most recent 12-month period. All records shall be maintained on site in accordance with Permit Condition 2.22.

[PTC No. P-2011.0109, 9/19/11]

- 11.8 The permittee shall maintain documentation which demonstrates the standby generator does not exceed the 40 gallon per hour combustion rate limit. Documentation may consist of manufacturer performance specifications.

[PTC No. P-2011.0109, 9/19/11]

## Permit Limits/Standard Summary-AMWTF

### Emissions Limits and Operating Requirements

- 11.9 Annual emissions of NO<sub>x</sub> from the three boilers at the AMWTF shall not exceed the limit listed in Table 11.3.

**Table 11.3 EMISSIONS LIMITS**  
**Advanced Mixed Waste Treatment Facility**  
**Emissions Limits<sup>a</sup>**

| Source Description                      | Nitrogen Oxides   |
|---|-------------------|
|   | T/yr <sup>b</sup> |
| Aggregate emissions from three boilers. | 3.1               |

<sup>a</sup> As determined by a pollutant-specific EPA reference method, a DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit

<sup>b</sup> Tons per year based on any consecutive 12-month period.

[PTC No. 023-00001, 6/7/02]

- 11.10 The permittee shall combust propane exclusively in the three 12.55 MMBtu/hr boilers and one 2.0 MMBtu/hr potable water heater at the facility.

[PTC No. 023-00001, 6/7/02]

- 11.11 The aggregate fuel consumption for the three boilers at the AMWTF shall not exceed 322,084 gallons per consecutive 12-month period.

[PTC No. 023-00001, 6/7/02]

### Monitoring, Recordkeeping, and Reporting Requirements

- 11.12 The permittee shall maintain documentation of the type of fuel burned in each boiler and the potable water heater at the AMWTF. The permittee shall also monitor the aggregate amount of fuel burned in the three boilers per any consecutive 12-month period. All records shall be maintained on site in accordance with Permit Condition 2.22.

[IDAPA 58.01.01.322.06, 07, 5/1/94, PTC No. 023-00001, 6/7/02]

## 12. TIER I OPERATING PERMIT GENERAL PROVISIONS

### **General Compliance**

1. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.  
[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]
2. It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.  
[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]
3. Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.  
[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

### **Reopening**

4. This permit may be revised, reopened, revoked and reissued, or terminated for cause. Cause for reopening exists under any of the circumstances listed in IDAPA 58.01.01.386. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable in accordance with IDAPA 58.01.01.360 through 369.  
[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1), (2); 40 CFR 70.6(a)(6)(iii)]
5. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

### **Property Rights**

6. This permit does not convey any property rights of any sort, or any exclusive privilege.  
[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

### **Information Requests**

7. The permittee shall furnish all information requested by DEQ, within a reasonable time, that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.  
[Idaho Code §39-108; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]
8. Upon request, the permittee shall furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including IDAPA 58.01.01.128.  
[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

## **Severability**

9. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

## **Changes Requiring Permit Revision or Notice**

10. The permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee shall comply with IDAPA 58.01.01.380 through 386 as applicable.

[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99; IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14), (15), and 70.7(d), (e)]

11. Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA, 42 U.S.C. Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off-permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14) and (15)]

## **Federal and State Enforceability**

12. Unless specifically identified as a "State-only" provision, all terms and conditions in this permit, including any terms and conditions designed to limit a source's potential to emit, are enforceable: (i) by DEQ in accordance with state law; and (ii) by the United States or any other person in accordance with federal law.

[IDAPA 58.01.01.322.15.j, 5/1/94; 40 CFR 70.6(b)(1) and (2)]

13. Provisions specifically identified as a "State-only" provision are enforceable only in accordance with state law. "State-only" provisions are those that are not required under the Federal Clean Air Act or under any of its applicable requirements or those provisions adopted by the state prior to federal approval.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.k, 3/23/98]

## **Inspection and Entry**

14. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- a. Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

- d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.
- e. DEQ, or its authorized representative, understands that certain INL areas may require personnel controls including, but not limited to, qualified escorts, security clearances, radiological training, and safety training.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.i, 5/1/94; 40 CFR 70.6(c)(2)]

### ***New Requirements During Permit Term***

15. The permittee shall comply with applicable requirements that become effective during the permit term on a timely basis.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94;  
40 CFR 70.6(c)(3) citing 70.5(c)(8)]

### ***Fees***

16. The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.

[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

### ***Certification***

17. All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

### ***Renewal***

18.
  - a. The owner or operator of a Tier I source shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

- b. If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

### ***Permit Shield***

19. Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- a. Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
  - i. DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.

- b. The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- c. Nothing in this permit shall alter or affect the following:
  - i. Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
  - ii. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - iii. The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
  - iv. The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.

**[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00;  
 IDAPA 58.01.01.322.15.m, 325.01, 5/1/94; IDAPA 58.01.01.325.02, 3/19/99;  
 IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]**

***Compliance Schedule and Progress Reports***

- 20. a. For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
- b. For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.
- c. For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
- d. For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.

**[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00;  
 40 CFR 70.6(c)(3) and (4)]**

***Periodic Compliance Certification***

- 21. The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as follows:
  - a. The compliance certifications for all emissions units shall be submitted annually from January 1 to December 31 of each year or more frequently if specified by the underlying applicable requirement or elsewhere in this permit by DEQ. The compliance certifications shall be submitted no later than February 28 of each year.
  - b. The initial compliance certification for each emissions unit shall address all of the terms and conditions contained in the Tier I operating permit that are applicable to such emissions unit including emissions limitations, standards, and work practices;
  - c. The compliance certification shall be in an itemized form providing the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):

- i. The identification of each term or condition of the Tier I operating permit that is the basis of the certification;
  - ii. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under Subsections 322.06, 322.07, and 322.08;
  - iii. The status of compliance with the terms and conditions of the Tier I operating permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Subsection 322.11.c.ii. above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
  - iv. Such information as the Department may require to determine the compliance status of the emissions unit.
- d. All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.

[IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 70.6(c)(5)(iii) as amended,  
62 Fed. Reg. 54900, 54946 (10/22/97); 40 CFR 70.6(c)(5)(iv)]

### ***False Statements***

22. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.
- [IDAPA 58.01.01.125, 3/23/98]

### ***No Tampering***

23. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.
- [IDAPA 58.01.01.126, 3/23/98]

### ***Semiannual Monitoring Reports***

24. In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months. The permittee's semiannual reporting periods shall be from January 1 to June 30 and July 1 to December 31. All instances of deviations from this operating permit's requirements must be clearly identified in the report. The semiannual reports shall be submitted to DEQ no later than August 31 and February 28 of each year.
- [IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c,  
4/5/00; 40 CFR 70.6(a)(3)(iii)]

### ***Reporting Deviations and Excess Emissions***

25. The permittee shall promptly report all deviations from permit requirements including upset conditions, their probable cause, and any corrective actions or preventive measures taken. For excess emissions, the report shall be made in accordance with IDAPA 58.01.01.130-136. For all other deviations, the report shall be made in accordance with IDAPA 58.01.01.322.08.c, unless otherwise specified in this permit.
- [IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/11/06; 40 CFR 70.6(a)(3)(iii)]

### **Permit Revision Not Required**

26. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.  
**[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]**

### **Emergency**

27. In accordance with IDAPA 58.01.01.332, any sudden and reasonably unforeseeable event beyond the control of the owner or operator which requires immediate corrective action to restore normal operation and which meets the definition of an "emergency," as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.  
**[IDAPA 58.01.01.332.01, 4/5/00; IDAPA 58.01.01.008.06, 4/5/00; 40 CFR 70.6(g)]**