STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

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

June 26, 2014

George Vigil, Site Director
Micron Technology, Inc.
1401 N Kings Road
Nampa, Idaho 83687

Jeff Mendiola, VP of Operations
Aptina, LLC
1401 N Kings Road
Nampa, Idaho 83687

RE: Facility ID No. 027-00095, Micron Technology, Inc., Nampa
Automatic Transfer of Tier II Operating Permit and Permit to Construct

Dear Mr. Vigil and Mr. Mendiola:

This letter acknowledges receipt on June 12, 2014, of a request for an automatic transfer of Tier II operating permit and permit to construct in accordance with IDAPA 58.01.01.404.05.b and 209.06.b (Rules for the Control of Air Pollution in Idaho). The transfer request is for Tier II Operating Permit and Permit to Construct No. T2-2010.0185, issued April 1, 2011, modified July 25, 2011, and is based on the following information:

Current Permittee Information

| | |
|---|---|
| Permittee: | Micron Technology, Inc. |
| Mailing Address: | 1401 N. Kings Road, Nampa , Idaho 83687 |
| Responsible Official: | George Vigil, Site Director, gvigil@micron.com |
| Phone Number: | (208) 363-1362 |
| Person to Contact: | Shane Brown, Facility Operations Manager, shanebrown@aptina.com |
| Phone Number: | (208) 368-4721 |

Proposed Permittee Information

| | |
|---|---|
| Permittee: | Aptina, LLC |
| Mailing Address: | 1401 N. Kings Road, Nampa Idaho 83687 |
| Responsible Official: | Jeff Mendiola, VP of Operations, jmendiola@aptina.com |
| Phone Number: | (208) 472-6754 |
| Person to Contact: | Shane Brown, Facility Operations Manager, shanebrown@aptina.com |
| Phone Number: | (208) 368-4721 |

All other information in the permit remains the same.

Attached to this letter is the written documentation, signed by the current and proposed permittees, containing a date for transfer of permit responsibility, designation of the permittee's responsible official, and certification that Aptina LLC intends to operate in accordance with the permit terms and conditions and IDAPA 58.01.01.404.05.b.ii and 209.06.b. The effective date of the permit transfer is July 15, 2014. DEQ recommends that you maintain a copy of this letter, and the attachment containing your original request, for your records.

This transfer does not release Aptina LLC from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. If you have any questions, please contact Robert Baldwin at (208)373-0502 or robert.baldwin@deq.idaho.gov.

Sincerely,

Bill Rogers for

Mike Simon
Stationary Source Program Manager
Air Quality Division

Attachment

MS/REB Permit No. T2-2010.0185 PROJ 61389

Aptina, LLC
2660 Zanker Road
San Jose, CA 95134
Tel: 408-660-2699
aptina.com



May 30, 2014

Idaho Department of Environmental Quality
Attn: Mr. Bill Rogers
1410 N. Hilton
Boise, ID 83706

Re: Cover Letter
Automatic Permit Transfer
Aptina, LLC

Dear Mr. Rogers:

Aptina, LLC ("Aptina") is requesting an automatic transfer of an air quality Tier II Operating Permit and Permit-To-Construct (Tier II/PTC), T2-2010.0185 from Micron Technology, Inc. ("Micron") issued by the Idaho Department of Environmental Quality (IDEQ) on April 1, 2011 and modified on July 25, 2011. Aptina is requesting to execute this permit transfer in accordance with IDAPA 58.01.01.209.06.b and is hereby notifying IDEQ of the proposed transfer date of July 15, 2014.

Aptina has included the following attachments to support the automatic permit transfer request from Micron to Aptina:

- Automatic Permit Transfer Letter
- IDEQ General Information Form
- IDEQ Permit No. T2-2010.0185

Based on information and belief formed after reasonable inquiry, the statements and information in this letter are true, accurate, and complete.

If you have any questions with this permit transfer request please contact Rick McCormick, CH2M HILL, at 208-383-6457.

Aptina, LLC

Jeff Mendiola
VP of Operations

Aptina, LLC
2660 Zanker Road
San Jose, CA 95134
Tel: 408-660-2699
aptina.com

May 30, 2014

Idaho Department of Environmental Quality
Attn: Mr. Bill Rogers
1410 N. Hilton
Boise, ID 83706

Re: Automatic Permit Transfer
Aptina, LLC

Dear Mr. Rogers:

Aptina, LLC ("Aptina") is engaging in a business agreement for an existing semiconductor manufacturing facility from Micron Technology, Inc. ("Micron") located at 1401 N. Kings Road in Nampa, Idaho. Micron is the owner/operator of this facility and currently maintains an air quality Tier II Operating Permit and Permit-To-Construct (Tier II/PTC), T2-2010.0185 issued by the Idaho Department of Environmental Quality (IDEQ) on April 1, 2011 and modified on July 25, 2011. Aptina is in the process of purchasing assets from Micron and is proposing to take over operations of the Nampa semiconductor manufacturing facility on July 15, 2014.

Aptina is requesting an automatic transfer of this Tier II/PTC in accordance with IDAPA 58.01.01.209.06.b and general permit provision 13 (T2-2010.0185).

Aptina has reviewed permit T2-2010.0185 with intention to operate in accordance with the permit terms and conditions. No changes in operations, processes, or increase in emissions are proposed for this automatic transfer request. Furthermore, it is our understanding that if Micron and Aptina are not notified within 30 days of receipt of this request, the permit transfer will be effective on July 15, 2014.

This notice will serve as transfer of permit responsibility for complying with permit T2-2010.0185 and certification when signed by the following responsible officials for both Aptina and Micron:

**Micron Technology, Inc.**

By _____
*George Vigil, Site Director*

Date: 6/11/2014

**Aptina, LLC**

By _____
*Jeff Mendola, VP of Operations*

Date: 5/29/2014

Permit # T2-2010.0185
Project # 61389
Facility ID # 027-00095
Regional Office BRO
Logged: [illegible]

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

July 25, 2011

Donald Sukut, Facilities Operations Manager
Micron Technology, Inc.
P.O. Box 6 MS 01-602
Boise, ID 83706-0006

RE: Facility ID No. 027-00095, Micron Technology, Inc., Nampa
Tier II Operating Permit Revision – Responsible Official and Facility Contact Name Changes

Dear Mr. Sukut:

This letter acknowledges receipt on July 15, 2011 of a request for the responsible official and facility contact name changes for a Tier II operating permit and Permit to Construct (Tier II/PTC), in accordance with IDAPA 58.01.01 404.04 (Rules for the Control of Air Pollution in Idaho). The name change request is for Tier II/PTC No. T2-2010.0185, issued April 1, 2011, and is based on the following information:

**Current Permittee Information**

| | |
|---|---|
| Permittee: | Micron Technology, Inc. |
| Mailing Address: | P.O. Box 6 MS 01-602 |
| Responsible Official: | Dale Eldridge, Director of Facilities, deldridge@micron.com |
| Phone Number: | (208) 368-4000 |
| Person to Contact: | Beth Elroy, Environmental Manager, eelroy@micron.com |
| Phone Number: | (208) 368-4000 |

**Proposed Permittee Information**

| | |
|---|---|
| Permittee: | Micron Technology, Inc. |
| Mailing Address: | P.O. Box 6 MS 01-602 |
| Responsible Official: | Donald Sukut, Facilities Operations Manager, dsukut@micron.com |
| Phone Number: | (208) 368-4000 |
| Dual Responsible Official: | Jose Tovar, Fab 9D Manager, jtovar@micron.com |
| Phone Number: | (208) 368-4000 |
| Person to Contact: | Leslie Swann, Environmental Engineer, lbird@micron.com |
| Phone Number: | (208) 368-4000 |

DEQ is only revising the cover page of the Tier II/PTC. All other information in the permit remains the same.

Attached to this letter is revised Tier II/PTC No. T2-2010.0185 with the revised permit cover page reflecting the name changes. The effective date of the Tier II/PTC transfer is July 25, 2011. DEQ recommends that you maintain a copy of this letter for your records.

This transfer does not release Micron Technology, Inc. from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. If you have any questions, please contact Kelli Wetzel at 208.373.0502 or kelli.wetzel@deq.idaho.gov.

Sincerely,

Mike Simon
Stationary Source Program Manager
Air Quality Division

Attachment

MS/KW Permit No. T2-2010.0185 PROJ 60899

**Air Quality**
**TIER II OPERATING PERMIT**
**and**
**PERMIT TO CONSTRUCT**

**State of Idaho**
**Department of Environmental Quality**

**PERMIT No.:** T2-2010.0185
**FACILITY ID No.:** 027-00095
**AQCR:** 64 **CLASS:** SM **ZONE:** 11
**SIC:** 3674 **NAICS:** 334413
**UTM COORDINATE (km):** 537.5, 4827.2

1. **PERMITTEE**
Micron Technology, Inc. - Nampa

2. **PROJECT**
Project #60899, Responsible Official and Facility Contact Name Changes

| 3. **MAILING ADDRESS** | **CITY** | **STATE** | **ZIP** |
|---|---|---|---|
| P.O. Box 6 MS 01-602 | Boise | ID | 83707-0006 |
| 4. **FACILITY CONTACT** | **TITLE** | **TELEPHONE** | |
| Leslie Swann | Environmental Engineer | (208) 368-4000 | |
| 5. **RESPONSIBLE OFFICIAL** | **TITLE** | **TELEPHONE** | |
| Donald Sukut or Jose Tovar | Facilities Operations Manager or Fab 9D Manager | (208) 368-4000 | |
| 6. **EXACT PLANT LOCATION** | | **COUNTY** | |
| 1401 N. Kings Road, Nampa, Idaho | | Canyon | |

7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**
Semiconductor Manufacturing and Support Operations

8. **PERMIT AUTHORITY**
This permit to construct and Tier II operating permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200 through 228 and IDAPA 58.01.01.400 through 470, respectively. This permit pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

Only the terms and conditions pertaining to Tier II operating permit requirements are subject to the expiration date of this permit.

The permit to construct conditions in this permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes in design, equipment or operations may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 through 228 of the Rules for the Control of Air Pollution in Idaho.

Kelli Wetzel

**KELLI WETZEL, PERMIT WRITER**
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mike Simon

**MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER**
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

| | |
|---|---|
| **DATE ISSUED:** | April 1, 2011 |
| **DATE MODIFIED/REVISED:** | July 25, 2011 |
| **DATE EXPIRES:** | April 1, 2016 |

# Table of Contents

## Acronyms, Units, and Chemical Nomenclature

| | |
|---|---|
| AAC | acceptable ambient concentration for non-carcinogens |
| AACC | acceptable ambient concentration for carcinogens |
| acfm | actual cubic feet per minute |
| AFS | AIRS Facility Subsystem |
| AIRS | Aerometric Information Retrieval System |
| AQCR | Air Quality Control Region |
| Btu | British thermal unit |
| CFR | Code of Federal Regulations |
| CO | carbon monoxide |
| DEQ | Department of Environmental Quality |
| dscf | dry standard cubic feet |
| EPA | U.S. Environmental Protection Agency |
| FEC | facility emissions cap |
| gpm | gallons per minute |
| HAPs | hazardous air pollutants |
| IDAPA | a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act |
| lb/hr | pound per hour |
| MMBtu | million British thermal units |
| $NO_2$ | nitrogen dioxide |
| $NO_X$ | nitrogen oxides |
| NSPS | New Source Performance Standards |
| NAICS | North America Industry Classification System |
| Pb | lead |
| PM | particulate matter |
| $PM_{10}$ | particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers |
| PTC | permit to construct |
| PTE | potential to emit |
| scf | standard cubic feet |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| SM | synthetic minor |
| $SO_2$ | sulfur dioxide |
| $SO_x$ | sulfur oxides |
| TAPs | toxic air pollutants |
| T/yr | tons per year |
| $\mu g/m^3$ | micrograms per cubic meter |
| UTM | Universal Transverse Mercator |
| VOC | volatile organic compound |

# 1. PERMIT SCOPE

## *Purpose*

**1.1** The purpose of this Tier II operating permit and permit to construct is to renew and revise the permit establishing the Facility Emissions Cap (FEC), PTC No. P-060013, issued on July 14, 2006 to Micron Technology, Inc.'s (MTI) Nampa facility located at 1401 N. Kings Road in Nampa, Idaho. Additionally, the renewed permit includes a decrease in the FEC for $PM_{10}$, $NO_X$, VOC, CO, and lead emissions from the levels in PTC No. P-060013; and incorporates a new modeling analysis to reflect the new property boundary for the facility.

**1.2** This Tier II operating permit and permit to construct is a renewal of the following permit:

- FEC Permit to Construct (PTC) No. P-060013, issued July 14, 2006

## *Regulated Sources*

**1.3** Table 1.1 lists all sources of regulated emissions in this permit.

**Table 1.1 REGULATED SOURCES**

| Permit Section | Source Description | Emissions Controls |
|---|---|---|
| 2 | Facility Wide Conditions<br>(Includes emissions from manufacturing processes, research and development operations, boilers, emergency stationary CI engines, cooling towers, and miscellaneous sources.) | |
| 3 | Facility Emissions Cap requirements<br>(The facility emissions cap applies to all regulated sources at the facility, including manufacturing operations, research and development operations, boilers, emergency stationary CI engines, and cooling towers.) | Wet scrubbers<br>VOC abatement units<br>Alternate VOC abatement technology |
| 4 | Semiconductor Manufacturing and Support Operations<br>(Includes, but is not limited to, silicon wafer cleaning, diffusion, photolithography, etch, doping, metallization, probe, test, assembly, and support operations.) | Wet scrubbers<br>VOC abatement units<br>Alternate VOC abatement technology |
| 5 | Requirements for Pollutants Regulated by IDAPA 58.01.01 585 and 586 | Wet scrubbers<br>VOC abatement units<br>Alternate VOC abatement technology |
| 6 | Natural Gas-Fired Boilers | Natural gas fuel only |
| 7 | Emergency Stationary CI Engines | None |

## 2. FACILITY-WIDE CONDITIONS

### *Fugitive Emissions*

2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, consideration will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

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 emissions.

2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that 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.

2.4 The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive 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 fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

### *Odors*

2.5 The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

2.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall, at a minimum, include the date that 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.

### *Visible Emissions*

2.7 The permittee shall not 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, $NO_X$, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

2.8 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 observations 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 accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

### *Open Burning*

2.9 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616.

### *Reports and Certifications*

2.10 Any reporting required by this permit, including but not limited to, records, monitoring data, supporting information, requests for confidential treatment, notifications of intent to test, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239
Telephone: (208) 373-0550
Fax: (208) 373-0287

### *Obligation to Comply*

2.11 In accordance with IDAPA 58.01.01.406 receiving a Tier II operating permit shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

### *Fuel-burning Equipment*

2.12 The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

### *Sulfur Content*

2.13 The permittee shall not sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

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

2.14 The permittee shall maintain documentation on an annual basis from all fuel suppliers, that fuel supplied complies with the fuel sulfur content limits of Permit Condition 2.13.

## 3. FACILITY EMISSIONS CAP REQUIREMENTS

### 3.1 Process Description

This permit authorizes changes to the facility, which increase emissions of criteria pollutants and HAPs for those changes that comply with the terms and conditions of this permit and that meet the requirements of IDAPA 58.01.01.181.

Table 3.1 FACILITY EMISSIONS DESCRIPTION

| Emissions Unit(s) / Process(es) | Emissions Control Device | Emissions Point |
|---|---|---|
| Boilers (natural gas-fired)<br>Existing – three 8.37 MMBtu/hr and one 8.17 MMBtu/hr boilers | Natural gas fuel only | Boiler stacks |
| Manufacturing Process | Wet scrubbers<br>VOC abatement units<br>Alternate VOC abatement technology | Scrubber stacks,<br>VOC abatement unit stacks<br>Alternate VOC abatement technology stacks |
| Emergency Stationary CI Engines | None | Generator stacks |
| Cooling Towers | Mist eliminators | Cooling tower cells |

## *Emissions Limits*

### 3.2 Criteria Pollutant and HAP Facility Emissions Cap

The $PM_{10}$, $SO_2$, $NO_X$, CO, VOC, Pb, and HAP emissions from the facility shall not exceed any corresponding facility emissions cap (FEC) limits listed in Table 3.2. Hazardous air pollutants are those listed in or pursuant to Section 112(b) of the Clean Air Act.

Table 3.2 FEC EMISSIONS LIMITS

| Source Description | $PM_{10}$ | $SO_2$ | $NO_X$ | CO | VOC | Lead | Individual HAPs | Aggregate HAPs |
|---|---|---|---|---|---|---|---|---|
| | T/yr[1] | T/yr[1] | T/yr[1] | T/yr[1] | T/yr[1] | lbs/yr[2] | T/yr[1] | T/yr[1] |
| Total Facility Emissions Cap | 11 | 6 | 26 | 26 | 53 | 40 | <10 | <25 |

[1] Tons per rolling 12-month period.
[2] Pounds per rolling 12-month period.

## *Monitoring and Recordkeeping Requirements*

### 3.3 Criteria Pollutant Facility Emissions Cap Compliance

**3.3.1** The permittee shall calculate and record estimated total $NO_X$, CO, $SO_2$, VOC, $PM_{10}$, and Pb emissions for all combustion sources each calendar month, based on fuel consumption for natural gas combustion sources and based on hours of operation for emergency stationary CI engines powering electrical generators and fire-water pumps using the equations and emissions factors identified in the permittee's application, dated December 20, 2010, or other DEQ approved method. Records shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

**3.3.2** The permittee shall maintain records of materials used in the manufacturing processes. The permittee shall estimate manufacturing-related total emissions of $PM_{10}$, $SO_2$, $NO_X$, CO, VOC, and Pb for each calendar month. Estimates of actual emissions may take into account the control efficiencies of each wet scrubber, VOC abatement unit, or alternate VOC abatement technology as provided by the wet scrubber, VOC abatement unit, or alternate VOC abatement technology manufacturer, or applicable engineering data. The permittee shall not take into account control efficiencies when estimating emissions from manufacturing processes not exhausted to such devices. Manufacturing processes total

$PM_{10}$, $SO_2$, $NO_X$, CO, VOC, and Pb emissions shall be calculated using the equations and methods identified in the permittee's application dated December 20, 2010, or other DEQ approved method.

3.3.3 The permittee shall calculate and record estimated $PM_{10}$ emissions for the cooling towers using drift loss, total dissolved solids in the cooling water, and water flow rate for each calendar month as described in the permittee's application, dated December 20, 2010. As an alternative, the permittee may calculate $PM_{10}$ emissions using drift loss, total dissolved solids in the cooling water, flow rate capacities, and hours of operation for each calendar month. Where the permittee uses water flow rate capacities, it shall do so consistent with the method described in using the equations and emissions factors identified in the permittee's application, dated December 20, 2010. Records shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

3.3.4 The permittee shall calculate rolling 12-month total facility-wide estimated emissions of $PM_{10}$, $SO_2$, $NO_X$, CO, VOC, and Pb for each calendar month. Emissions totals shall be available within 60 days of the end of a month. The permittee shall total $PM_{10}$, $SO_2$, $NO_X$, CO, VOC, and Pb emissions as calculated for the combustion sources (Permit Condition 3.3.1), the manufacturing sources (Permit Condition 3.3.2), and the cooling towers (Permit Condition 3.3.3) to determine compliance with the criteria pollutant and HAP FEC (Permit Condition 3.2). Records shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

## 3.4 HAP Facility Emissions Cap Compliance

3.4.1 The permittee shall calculate and record estimated total individual and aggregate HAP emissions for all combustion sources for each calendar month, based on fuel consumption for natural gas combustion sources and based on hours of operation for emergency stationary CI engines powering electrical generators and fire-water pumps using the equations and emissions factors identified in the permittee's application dated December 20, 2010, or other DEQ approved alternative method. Records shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

3.4.2 The permittee shall maintain records of HAP containing materials used in the manufacturing processes. The permittee shall estimate manufacturing-related emissions of total individual and aggregate HAP emissions for each calendar month. Estimates of actual emissions may take into account the control efficiencies of each wet scrubber, VOC abatement unit, or alternate VOC abatement technology as provided by the wet scrubber, VOC abatement unit, or alternate VOC abatement technology manufacturer or applicable engineering data. The permittee shall not take into account control efficiencies when estimating emissions from manufacturing processes not exhausted to such devices. Manufacturing processes total HAP emissions shall be calculated using the equations and methods identified in the permittee's application dated December 20, 2010.

3.4.3 The HAP contents of each material shall be documented by a certified product data sheet, material safety data sheet, or actual test data.

3.4.4 The permittee shall calculate rolling 12-month total facility-wide estimated emissions of individual and aggregate HAPs for each calendar month. Emissions totals shall be available within 60 days of the end of a month. The permittee shall total estimated HAP emissions as calculated for the combustion sources (Permit Condition 3.4.1) and the manufacturing sources (Permit Condition 3.4.2) to determine compliance with the criteria pollutant and HAP FEC (Permit Condition 3.2). Records shall be

maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

## Reporting Requirements

**3.5 Reporting**

**3.5.1** Once per year, the permittee shall report to DEQ the 12-month total facility-wide criteria pollutant and HAP emissions recorded under the criteria pollutant emissions calculation (Permit Condition 3.3.4) and HAP emissions calculation (Permit Condition 3.4.4) used to determine compliance with the criteria pollutant and HAP FEC (Permit Condition 3.2). The report shall include, but is not limited to, all methods, equations, emissions factors, and sources for emissions factors not previously identified used to determine the 12-month total facility-wide criteria pollutant and HAP emissions. Records of the quantity of materials used in the manufacturing processes (Permit Conditions 3.3.2 and 3.4.2) used for determining the 12-month total facility-wide criteria pollutant and HAP emissions shall be submitted with the annual report. In addition, the permittee shall provide DEQ with the 12-month rolling emissions totals generated under the criteria pollutant emissions calculation (Permit Condition 3.3.4) and HAP emissions calculation (Permit Condition 3.4.4) for the reporting period.

Any changes in the equipment log (Permit Condition 3.8) not identified in the previous annual report shall be identified and explained. The report shall be for the period July 1st through June 30th and shall be due on or before September 1st of each calendar year. All reports must be certified in accordance with IDAPA 58.01.01.123. The report shall be sent to DEQ at the following address:

Air Quality Stationary Source Division
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
Telephone: (208) 373-0502
Fax: (208) 373-0340

## General FEC Conditions

**3.6 Notice and Recordkeeping of Ambient Concentration Estimates**

**3.6.1** For facility changes that comply with the terms and conditions establishing the FEC, but are not included in the estimate of ambient concentration analysis approved for the permit establishing the FEC, the permittee shall review the estimate of ambient concentration analysis. In the event the facility change would result in a significant contribution above the design concentration determined by the estimate of ambient concentration analysis approved for the permit establishing the FEC, but does not cause or significantly contribute to a violation to any ambient air quality standard, the permittee shall provide notice to DEQ in accordance with IDAPA 58.01.01.181.01.b. The permittee shall record and maintain documentation of the review on site.

**3.6.2** In accordance with IDAPA 58.01.01.181.03, the permittee shall use the most current EPA-approved regulatory guideline model to estimate ambient concentrations where required by the ambient concentration analysis (Permit Condition 3.6.1), except where DEQ approves the permittee's use of an alternative model. The permittee is strongly encouraged to submit a modeling protocol to DEQ for review and approval prior to conducting a modeling analysis using a model that differs from that used in the permit application.

## 3.7 Renewal

3.7.1 In accordance with IDAPA 58.01.01.179.02, the permittee shall submit a complete application for a renewal of the terms and conditions establishing the FEC at least six months before, but no earlier than 18 months before, the expiration date of this permit.

3.7.2 In accordance with IDAPA 58.01.01.177.02, the permittee's renewal application for this permit shall include ambient concentration estimates as specified in IDAPA 58.01.01.202.02 or IDAPA 58.01.01.402.03.

## 3.8 List of Equipment

3.8.1 A list of scrubbers, VOC abatement units, alternate VOC abatement technology units, emergency stationary CI engines, boilers, and cooling towers installed at the facility shall be maintained by the permittee and provided to DEQ personnel upon request. The list shall include:

- Identification if equipment was included in the permit application;
- Identification if in service at time of permit issuance;
- Equipment location;
- Installation date, if installed after permit issuance;
- De-installation date if removed after permit issuance; and
- Identification if equipment is subject to NSPS requirements (40 CFR 60).
- Identification if equipment is subject to NESHAP requirements (40 CFR 63).

# 4. SEMICONDUCTOR AND SUPPORT OPERATIONS

## 4.1 Process Description

Semiconductor manufacturing and support operations performed at this facility include, but are not limited to: photolithography, cleaning, diffusion, wet etch, dry etch, implant, metallization, and assembly.

## 4.2 Emissions Controls Description

Table 4.1 SEMICONDUCTOR MANUFACTURING AND SUPPORT OPERATIONS

| Emissions Unit(s)/Processes | Emissions Control Device | Emissions Point |
|---|---|---|
| Manufacturing Processes | Wet scrubbers<br>VOC abatement units<br>Alternate VOC abatement technology | Scrubber stacks<br>VOC abatement unit stacks<br>Alternate VOC abatement technology stacks<br>General exhaust stacks |

## *Emissions Limits*

## 4.3 Opacity Limit

Emissions from any stack, vent, or functionally equivalent opening at the facility shall not 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.

## *Operating Requirements*

## 4.4 Wet Scrubber Operating Conditions

4.4.1 The permittee shall properly operate and maintain wet scrubbers, thereby limiting the facility's potential to emit regulated air pollutants and substances regulated by IDAPA 58.01.01.585 and 586. Proper operation shall include rotation of wet scrubbers in and out of active service where the scrubber system design includes redundant scrubbers for this purpose.

4.4.2 The minimum liquid recirculation rate of the wet scrubbers shall be maintained. The permittee shall install and operate instruments to monitor the scrubbing liquid recirculation rate.

4.4.3 The scrubber liquid pH shall be properly maintained. The permittee shall install and operate instruments to monitor the pH of the scrubber liquid.

4.4.4 The scrubber pump operational status shall be properly maintained. Proper operational status is ensuring the scrubber liquid is circulating. The permittee shall install and operate instruments to monitor the pump on/off status or instruments to measure the presence of liquid flow.

4.4.5 The permittee shall maintain a log that contains the minimum scrubbing liquid recirculation flow rate and pH range required to maintain proper performance for each wet scrubber based on manufacturer's data or applicable engineering data. If an existing scrubber is modified so that the proper scrubber flow rate or pH is changed, or a new scrubber is installed, the log shall be updated to reflect the minimum recirculation flow rate and pH for the new or modified scrubber. The log shall be maintained on site and made available to DEQ representatives upon request.

4.4.6 The permittee shall take corrective action as expeditiously as practicable whenever there is scrubber downtime or a malfunction. When calculating emissions from manufacturing processes for criteria pollutants (Permit Condition 3.3) and HAPs (Permit Condition 3.4) to determine compliance with the criteria pollutant and HAP FEC (Permit Condition 3.2) emissions cap , the permittee shall use uncontrolled emission rates for pollutants normally emitted through the scrubbers for time periods when the scrubber exhaust is routed to the atmosphere without control or the unit is operating outside the parameters specified in the wet scrubber operating parameters log (Permit Condition 4.4.5). Downtime of a scrubber unit or operation outside the parameters established in this permit shall not in itself constitute a violation of this permit as long as the calculated uncontrolled emissions rates do not contribute to facility-wide emissions levels that exceed any limit established by this permit. Scrubber downtime does not include time periods when a unit is in standby mode as a backup for operating scrubbers.

## 4.5 VOC Abatement Unit Operating Conditions

For the purposes of this permit, certain terms are defined as follows:

- "Coat track" means a manufacturing tool that performs a process called coat bake in a photolithography area of the facility.
- "Coat bake" means a batch process where liquids potentially containing volatile organic compounds (VOCs) are applied to the surface of silicon wafers and then cured.
- "Facility" means the manufacturing facility located at 1401 N. Kings Road, in Nampa, Idaho.
- "VOC abatement unit" means a system that gathers, concentrates, and oxidizes volatile organic compounds (VOCs).
- "Alternate VOC abatement technology" means a VOC abatement system that will be determined and installed on a case-by-case basis as additional manufacturing equipment that is exempt from obtaining a PTC is installed at the facility.

4.5.1 Unless the emissions are vented to the atmosphere, scrubber exhaust, or general exhaust (as allowed by Permit Condition 4.5.2) or an alternate VOC abatement technology device is used (as allowed by Permit Condition 4.5.7), the permittee shall route emissions from the coat tracks to a VOC abatement unit. The permittee shall operate the VOC abatement units to control emissions from the coat tracks thereby limiting the facility's potential to emit VOCs and substances regulated by IDAPA 58.01.01.585 and 586.

4.5.2 The facility may route emissions from the coat tracks to the atmosphere, scrubber exhaust, or general exhaust subject to the following conditions:

- Total emissions from all coat tracks that are not routed to VOC abatement units or alternate VOC abatement technology shall not exceed 25 tons-VOC per year.
- The permittee shall maintain a list of all coat tracks that are not routed to VOC abatement units or alternate VOC abatement technology. Records are to include the date that each tool was initially routed to the atmosphere, scrubber exhaust, or general exhaust and the date that the same tool is connected to abatement if applicable.

4.5.3 Once per month, the permittee shall calculate and record emissions using the methods specified in the manufacturing processes criteria pollutant emissions estimate (Permit Condition 3.3.2) for the coat tracks routed to atmosphere, scrubber exhaust, or general exhaust (as allowed by Permit Condition 4.5.2). The permittee shall calculate rolling 12-month total VOC emissions for the coat tracks routed to atmosphere, scrubber exhaust, or general exhaust (as allowed by Permit Condition 4.5.2) to determine compliance with the 25 tons-VOC per year emissions limit (specified in Permit Condition 4.5.2).

4.5.4 The permittee shall, at all times, properly operate and maintain the VOC abatement units. Proper operation and maintenance includes downtime for repairs and maintenance.

4.5.5 The permittee shall operate the VOC abatement units according to manufacturers' recommendations as follows:

a) Oxidation temperature shall be 1,350 °F or greater.
b) Desorption temperature shall be 340 °F or greater.
c) Each unit shall not be operated outside of the manufacturer's design flow capacity. Design flow capacity for each unit shall be maintained on site and made available to DEQ representatives upon request.

4.5.6 When calculating emissions to determine compliance with the criteria pollutant and HAP FEC (Permit Condition 3.2) and TAP compliance (Permit Condition 5.1), the permittee shall use uncontrolled emission rates for pollutants normally emitted through the VOC abatement units for time periods when the VOC abatement unit is not operating or is operating outside the VOC abatement unit operating parameters (Permit Condition 4.5.5). Downtime of the VOC abatement unit or operation outside of the parameters established in this permit shall not in itself constitute a violation of this permit as long as the calculated uncontrolled emissions rates do not contribute to facility-wide emissions levels that exceed any limits established by this permit.

4.5.7 The permittee may use alternate VOC abatement technology to control emissions from the coat tracks in lieu of the VOC abatement unit operating requirements (specified in Permit Conditions 4.5.1, 4.5.4, 4.5.5, 4.5.6, and 4.7.2) in accordance with the following requirements:

- Uncontrolled emissions from the coat tracks using alternate abatement technology must meet the general exemption criteria for permits to construct in IDAPA 58.01.01.220;
- Controlled emissions from the coat tracks when using the approved alternate VOC abatement technology must meet the Category I Exemption requirements for VOCs in IDAPA 58.01.01.221. Compliance with the requirements of IDAPA 58.01.01.223 may be demonstrated in accordance with the provisions of TAP Compliance Section (Section 5) of this permit;
- The facility shall submit notification to DEQ prior to startup of the alternate VOC abatement technology. The notice shall include the calculations used to demonstrate the coat tracks using alternate VOC abatement technology are exempt from the requirement to obtain a permit to construct;
- The facility shall submit a description of the alternate VOC abatement technology, and a monitoring and recordkeeping plan to demonstrate the unit is being properly operated. Proper operation and maintenance includes downtime for repairs and maintenance. The facility may begin operating the alternate VOC abatement technology upon DEQ approval of the monitoring and recordkeeping plan; and
- Within 180 days of startup of the alternate VOC abatement technology, the facility shall submit an application to incorporate the DEQ approved operating and monitoring plan for the alternate VOC abatement technology into this permit.

## *Monitoring and Recordkeeping Requirements*

### 4.6 Wet Scrubbers

**4.6.1** The permittee shall record the date and time that any scrubber exhaust is routed to the atmosphere without control due to equipment breakdown or routine maintenance. If uncontrolled emissions are determined to exceed any permit limit, the event shall be reported as excess emissions in accordance with IDAPA 58.01.01.131.

**4.6.2** Scrubber Water Flow Monitoring:

- The permittee shall monitor and record the scrubber water pH at least once every 15-minutes.
- The permittee shall monitor and record the operational status (on/off status or presence of liquid flow) of the scrubbing water recirculation pumps at least once every 15-minutes.
- Once per calendar month the permittee shall monitor and record the scrubbing water flow rate through each scrubber. These records shall note redundant scrubbers that are not operating during the monthly inspection.

### 4.7 VOC Abatement Units

**4.7.1** The permittee shall record the date and time that any VOC abatement unit exhaust is routed to the atmosphere without control due to equipment breakdown or routine maintenance. If uncontrolled emissions are determined to exceed any permit limit, the event shall be reported as excess emissions in accordance with IDAPA 58.01.01.131.

**4.7.2** VOC abatement unit monitoring:

- The permittee shall install and operate equipment that will allow the permittee to continuously monitor of the VOC abatement unit oxidation temperature (°F) and desorption temperature (°F).
- Once per day, the permittee shall record the VOC abatement unit oxidation temperature (°F) and desorption temperature (°F).
- Once per month, the permittee shall record the volumetric flow rate (acfm) to each VOC abatement unit.

# 5. REQUIREMENTS FOR POLLUTANTS REGULATED BY IDAPA 58.01.01.585-586

## 5.1 TAP COMPLIANCE

**5.1.1** This permit authorizes the permittee to install sources or make modifications to the facility which change emissions of pollutants listed in IDAPA 58.01.01.585 and 586. The permittee shall monitor material usage to calculate monthly average hourly process emissions of substances listed at IDAPA 8.01.01.585 and 586. If the increase in hourly emissions ($E_i$ from equation 5.1) exceeds 80% of the AAC or AACC for each respective pollutant ($E_{ia}$, from equation 5.2 or 5.3), the permittee shall conduct a refined exemption modeling analysis for the pollutant to demonstrate compliance with the respective AAC or AACC. The most recent five years of calculated emission rates and calculations shall be maintained on site and made available to DEQ representatives upon request.

$E_i$ is calculated from the following equation;

$$E_i = \frac{E_m}{H_m} - M_u \qquad \text{(Equation 5.1)}$$

For substances listed in IDAPA 58.01.01.585;

$$E_{ia} = \frac{\left(AAC \times 0.8 \times 1{,}000\ {}^{\mu g}/_{mg}\right)}{CQ_{24\text{-}hour}} \qquad \text{(Equation 5.2)}$$

For substances listed in IDAPA 58.01.01.586;

$$E_{ia} = \frac{(AACC \times 0.8)}{CQ_{annual}} \qquad \text{(Equation 5.3)}$$

Where:

$AAC$ = Acceptable ambient concentration for non-carcinogens ($mg/m^3$)
$AACC$ =Acceptable ambient concentration for carcinogens ($\mu g/m^3$)
$E_{ia}$ = Increase in hourly emissions that triggers a refined modeling analysis (lb/hr)
$E_i$ = Calculated increase in hourly emissions (lb/hr)
$E_m$ = Calculated monthly emissions rate of each pollutant used (lb/month)
$H_m$ = Hours in the month of the calculation (hours/month)
$M_u$ = Baseline hourly emissions rate (lb/hr). If a baseline emissions rate for a specific pollutant does not exist, then $M_u = 0$
$CQ_{24\text{-}hr}$ = Chi/Q value for 24-hour averaging period = 15.04 $\mu g/m^3$ per lb/hr
$CQ_{annual}$ = Chi/Q value for annual averaging period = 3.06 $\mu g/m^3$ per lb/hr

**5.1.2** In the event that the permittee must conduct a permit applicability determination, the permittee may take into account the controls required by this operating permit in calculating potential to emit for equipment connected to such abatement.

## 6. NATURAL GAS-FIRED BOILERS

### 6.1 Process Description

The permittee currently operates natural gas-fired boilers for heat and humidification at the facility.

### *Operating Requirements*

### 6.2 Allowable Fuel

The boilers shall only combust natural gas as fuel.

### *Monitoring and Recordkeeping Requirements*

### 6.3 Monitor Boiler Fuel Usage and Annual Emissions

The permittee shall monitor and record the fuel usage for the boilers on a monthly basis using available data. Emissions from the boiler shall be included in the rolling 12-month criteria pollutant FEC compliance demonstration (Permit Condition 3.3) and HAP FEC compliance demonstration (Permit Condition 3.4). The permittee shall use the emission factors identified in the permittee's application dated December 20, 2010, or other emission factors approved by DEQ to calculate emissions.

## 7. EMERGENCY STATIONARY CI ENGINES

### 7.1 Process Description

The permittee currently has two emergency stationary compression ignition (CI) engines, and has proposed to install one additional emergency stationary CI engine. These engines are used to power electrical generators and fire-water pumps at the facility. The permittee performs routine testing and maintenance on these units.

### *Emissions Limits*

### 7.2 Emergency Stationary CI Engine Emissions Limits

- Emissions from the emergency stationary CI engines shall be included in the rolling 12-month criteria pollutant FEC (Permit Condition 3.3) and HAP FEC (Permit Condition 3.4) compliance demonstration. The permittee shall use the emission factors identified in the permittee's application dated December 20, 2010, or other emission factors approved by DEQ to calculate emissions.
- Emissions from the new emergency stationary CI engine shall not exceed the emission standards for a Tier I engine rated at 2220 brake horsepower.

### *Operating Requirements*

### 7.3 Allowable Fuels

All emergency stationary CI engines shall combust ASTM No. 1, 2, or mix of No. 1 and No.2 diesel with a maximum sulfur content of 15 ppm (0.0015%).

### 7.4 Hours of Operation for Maintenance

- The operation of each emergency stationary CI engine shall not exceed a maximum of four hours in any 24-hour period for routine testing and maintenance activities.
- The operation of each emergency stationary CI engine shall not exceed a maximum of 200 hours in any consecutive 12-month period for routine testing and maintenance activities.
- There is no time limit on the use of emergency stationary engines in emergency situations.
- The emergency stationary CI engines shall each be equipped with an hour meter and the permittee shall monitor and record the annual hours of operation. Records shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

### *Monitoring and Recordkeeping Requirements*

### 7.5 Monitoring Emergency Stationary CI Engine Hours of Operation and Certification

- Once per month, the permittee shall monitor and record the number of hours of operation of each emergency stationary CI engine. The hours of operation shall be used to calculate rolling 12-month emissions.

- As an alternative to recording the actual hours of operation each month, the permittee may monitor and record the actual hours of operation only once per year and assume that each emergency stationary CI engine operates 200 hours per year. The permittee must use 200 hours per year in the rolling 12-month emissions calculations unless the actual hours of operation are

greater than 200 hours per year, in which case the actual hours of operation shall be used to update the emissions calculation.

- The permittee shall keep records of the certification and rating of the new emergency stationary CI engine. The records shall be maintained on site and shall be made available to DEQ to DEQ representatives upon request.

## *MACT Requirements (40 CFR 63, Subpart ZZZZ)*

7.6 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. The standards apply to stationary compression ignition internal combustion engines (CI ICE) existing at the facility:

### 7.6.1 NESHAP 40 CFR 63, Subpart ZZZZ – Operating Limitations

On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6595, the permittee shall meet the applicable requirements specified in Table 2d to Subpart ZZZZ of Part 63.

SUMMARY OF TABLE 2D TO SUBPART ZZZZ OF PART 63

| For each... | You must meet the following requirement, except during periods of startup... |
|---|---|
| Emergency stationary CI RICE[a] | • Change oil and filter every 500 hours of operation or annually, whichever comes first;[b]<br>• Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and<br>• Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |

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

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

### 7.6.2 NESHAP 40 CFR 63, Subpart ZZZZ – General Compliance Requirements

On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6605, the permittee shall at all times operate and maintain the emergency engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

## *Monitoring, Recordkeeping, and Reporting Requirements*

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

On and after the compliance date of May 3, 2013 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 IC engine 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 in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with 40 CFR 63.6625(e)(3).
- 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, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply, 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 2d in accordance with 40 CFR 63.6625(i). The analysis program must be part of the maintenance plan for the engine.
  - If any of the limits are exceeded, the oil shall be changed within two days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the oil shall be changed within two 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.

### 7.6.4 NESHAP 40 CFR 63, Subpart ZZZZ – Continuous Compliance Requirements

On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6605, the permittee shall demonstrate continuous compliance with each applicable emission limitation and operating limitation in Table 2d to Subpart ZZZZ of 40 CFR 63 according to methods specified in Table 6, in accordance with 40 CFR 63.6640(a).

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 located at an area source of HAP | Work or Management practices | • Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or<br>• 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. |

- On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6605, the permittee shall report each instance in which each applicable emission limitation or operating limitation in Table 2d 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.

- The permittee shall also report each instance in which the applicable requirements in Table 8 were not met in accordance with 40 CFR 63.6640(e).

- On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6605, the permittee shall operate the emergency generator engine 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 according to these requirements, the engine will not be considered an emergency engine 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 generator engine 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. 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 generator engine 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.

### 7.6.5 NESHAP 40 CFR 63, Subpart ZZZZ – Reports and Records

- On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6605, the permittee shall keep the records described in 40 CFR 63.6655 in accordance with 40 CFR 63.6655 and 40 CFR 63.6660.
    - Records required in Table 6 of 40 CFR 63, Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.
    - 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 for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
    - The permittee shall keep each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.
    - The permittee must keep records of hours of operation of the CI engines in accordance with 40 CFR 63.6655(f).

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

On and after the compliance date of May 3, 2013 specified in 40 CFR 63.6605, 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.

## *NSPS Requirements (40 CFR 60, Subpart IIII)*

### 7.8 NSPS 40 CFR 60, Subpart IIII – Emission Standards for the Emergency Stationary CI Engine

The permittee shall comply with the emission standards for the emergency stationary CI engine with a displacement of less than 10 liters per cylinder and must meet the requirements of 40 CFR 60.4205(b).

## *Operating Requirements*

### 7.9 NSPS 40 CFR 60, Subpart IIII – Compliance Requirements

- The emergency generator engine may be operated for the purpose of maintenance checks and readiness testing in accordance with 40 CFR 60.4211(e), 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 internal combustion engines (ICE) in emergency situations.
    - For approval of additional hours to be used for maintenance checks and readiness testing, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the emergency ICE beyond 100 hours per year.
    - Any operation other than emergency operation, and maintenance and testing is prohibited.
- The permittee shall operate and maintain the emergency generator and control devices according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer, in accordance with 40 CFR 60.4211(a). In addition, the permittee may only change those settings that are permitted by the manufacturer. The permittee shall also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.

### 7.10 NSPS 40 CFR 60, Subpart IIII – Operating and Maintenance Requirements

The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205(b) according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer, over the entire life of the engine, in accordance with 40 CFR 60.4206.

### 7.11 NSPS 40 CFR 60, Subpart III – Monitoring Requirements

The permittee shall meet the monitoring requirements of 40 CFR 60.4209. In addition, the permittee shall also meet the monitoring requirements specified in 40 CFR 60.4211.

- The permittee shall install a non-resettable hour meter on the emergency generator, prior to startup of the engine.
- If the emergency generator is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached.

### 7.12 NSPS 40 CFR 60, Subpart III – Fuel Requirements

- The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b), in accordance with 40 CFR 60.4207(b) as follows:
    - 15 parts per million by weight (ppmw) maximum sulfur content; and a

- Minimum cetane index of 40, or maximum aromatic content of 35 volume percent.

### *Monitoring and Recordkeeping*

**7.13** **NSPS 40 CFR 60, Subpart IIII – Notification, Report, and Records**

- The permittee is not required to submit an initial notification as required in 40 CFR 60.7(a)(1) for the emergency generator engine, in accordance with 40 CFR 60.4214(b).
- If the emergency generator engine is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached, in accordance with 40 CFR 60.4214(c).

**7.14** The permittee shall comply with Table 8 to Subpart IIII of Part 60-Applicability of General Provisions to Subpart IIII.

## 8. TIER II PERMIT TO OPERATE GENERAL PROVISIONS

### *General Compliance*

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

**[Idaho Code §39-101, et seq.]**

2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

**[IDAPA 58.01.01.211, 5/1/94]**

3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

**[IDAPA 58.01.01.212.01, 5/1/94]**

### *Inspection and Entry*

4. 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 an emissions 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.

**[Idaho Code §39-108]**

### *Construction and Operation Notification*

5. DEQ shall deem the notification provisions of IDAPA 58.01.01.211 satisfied with respect to operations and equipment at the facility in place as of the date of permit issuance, and any future operations and/or new equipment installations or modifications that do not exceed the terms of this permit. Where required, the permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

   a. A notification of the anticipated date of initial stat1-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and;

   b. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

**[IDAPA 58.01.01.211, 5/1/94]**

## Performance Testing

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

   All performance 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, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

   Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

**[IDAPA 58.01.01.157, 4/5/00]**

## Monitoring and Recordkeeping

7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this 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 and 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.

**[IDAPA 58.01.01.211, 5/1/94]**

## Excess Emissions

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

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

## Certification

9. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

**[IDAPA 58.01.01.123, 5/1/94]**

## False Statements

10. 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]

### *Tampering*

11. 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]

### *Expiration and Renewal*

12. This permit shall be renewable on the expiration date, provided the permittee submits an application for renewal to the Department and continues to meet all terms and conditions contained in the permit. The expiration of this permit will not affect the operation of the stationary source of facility during the administrative procedure period associated with the permit renewal process.

[IDAPA 58.01.01.209.04, 7/1/02]

### *Transferability*

13. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]