

7/26/2011

Certified Mail

Ms. Joanne Reinhold  
General Electric Aircraft Engines, Evendale Plant  
One Neumann Way  
Mail Drop N123  
Cincinnati, OH 45215

Facility ID: 1431150060  
Permit Number: P0099305  
County: Hamilton

RE: DRAFT AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Cincinnati Enquirer. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777.

Sincerely,

  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 -Via E-Mail Notification  
HCDOES; Indiana; Kentucky



PUBLIC NOTICE  
Issuance of Draft Air Pollution Title V Permit  
General Electric Aircraft Engines, Evendale Plant

Issue Date: 7/26/2011

Permit Number: P0099305

Permit Type: Renewal

Permit Description: Renewal Title V permit for General Electric Aircraft Engines, Evendale Plant, which includes a number of jet engine test cells, process heaters, both emergency engines and generators, spray booth painting operations, storage tanks, solvent cleaning operations, polymer cure and ceramic operations.

Facility ID: 1431150060

Facility Location: General Electric Aircraft Engines, Evendale Plant  
One Neumann Way,  
Cincinnati, OH 45215

Facility Description: Aircraft Engine and Engine Parts Manufacturing

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control Title V operating permit for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Mike Kramer at Hamilton County Dept. of Environmental Services, 250 William Howard Taft Pkwy., Cincinnati, OH 45219-2660 or (513)946-7777. The permit, which includes a detailed description of the operations, and associated statement of basis for the permit requirements, can be downloaded from the Web page: [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc)





## Statement of Basis For Air Pollution Title V Permit

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| Facility ID:   | 1431150060  |
| Facility Name:   | General Electric Aircraft Engines, Evendale Plant |
| Facility Description:  | Manufactures aircraft engines                     |
| Facility Address:  | One Neumann Way, Cincinnati, OH 45215             |
| Permit #:  | P0099305, Renewal                                 |
| <p>This facility is subject to Title V because it is major for:</p> <p><input type="checkbox"/> Lead    <input checked="" type="checkbox"/> Sulfur Dioxide    <input checked="" type="checkbox"/> Carbon Monoxide    <input checked="" type="checkbox"/> Volatile Organic Compounds    <input checked="" type="checkbox"/> Nitrogen Oxides</p> <p><input type="checkbox"/> Particulate Matter ≤ 10 microns    <input type="checkbox"/> Single Hazardous Air Pollutant    <input checked="" type="checkbox"/> Combined Hazardous Air Pollutants</p> <p><input checked="" type="checkbox"/> Maximum Available Control Technology Standard(s)</p> |   |

### A. Standard Terms and Conditions

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| Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01 (U)?   | Yes |
| Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.  | No  |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)       | N/A |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3) | N/A |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)                          | N/A |



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| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E) | PTI 14-05563 Emissions units B053 and B054.<br>PTI 14-05794 Emissions units B026, B027, B028, B029, B043, B044, F019, and F020.<br>PTI 14-05933 Emissions units F014 and F015.<br>PTI 14-05618 Emissions units K030-K034.<br>P0104631 Emissions unit P274 |
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**B. Facility-Wide Terms and Conditions**

| Term and Condition (paragraph) | Basis        |                       | <u>Comments</u>  |
|--------------------------------|--------------|-----------------------|--|
|                                | SIP (3745- ) | Other 40 CFR          |  |
| B)(2)                          | 77-03(A)     |                       | Listing of Insignificant Emissions units.  |
| B)(3)                          | 15-05        |                       | Listing of de-minimis Emissions units.   |
| B)(4)-B(13)                    |              | Part 63 Subpart GG    | National Emission Standards for Aerospace Manufacturing and Rework Facilities.   |
| B)(14)                         |              | Part 82               | CFC Requirements.  |
| B)(15)                         | 20           | Part 61               | Asbestos removal requirements.   |
| B)(16)                         | 25           |                       | Ambient Air Quality and Emergency Episode Standards.   |
| B)(17)                         |              | Part 63 Subpart DDDDD | On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD. |

**C. Emissions Unit Terms and Conditions**

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| Key:<br>EU = emissions unit ID<br>ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)<br>OR = operational restriction<br>M = monitoring requirements | ENF = did noncompliance issues drive the monitoring requirements?<br>R = record keeping requirements<br>Rp = reporting requirements<br>ET = emission testing requirements (not including compliance method terms)<br>Misc = miscellaneous requirements |
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St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement

| EU(s)  | Limitation  | Basis       |              | ND | OR | M | St | ENF | R | St | Rp | St | ET | Misc | <u>Comments</u>   |
|--|---|-------------|--------------|----|----|---|----|-----|---|----|----|----|----|------|---|
|  |   | SIP (3745-) | Other 40 CFR |    |    |   |    |     |   |    |    |    |    |      |   |
| B001, B007-B013, B014-B016, B020, B042, B048, B017, B018, B024, B030, B031, B045-B047, P231, P234, and P235. | 20% Visible Emission<br>Except as specified by rule.              | 17-07(A)    |              | N  | N  | Y | N  | N   | Y | N  | Y  | N  | N  |      | OR: Other than No.6 fuel oil in B007-B009, inherently clean fuels are burned. On days when No.6 fuel oil is burned in B007-B009, visible emission checks are conducted. |
| B026-B029, B043, and B044.   | 10% Visible Emission  | 31-05(A)(3) |              | N  | Y  | N | N  | N   | N | N  | N  | N  | N  |      | OR: Inherently clean fuels are required to be burned.   |
| K030, K032, K033, and K034.  | 10% Visible Emission  | 31-05(A)(3) |              | N  | Y  | N | N  | N   | N | N  | N  | N  | N  |      | OR: The emissions units are controlled by a dry filtration system that ensures compliance with the VE limitation.   |
| B007-B009.   | 0.13 lb PE/MMBtu of actual heat input when burning No.6 fuel oil. | 17-10(C)    |              | N  | N  | Y | N  | N   | Y | N  | Y  | N  | N  |      | OR: On days when No.6 fuel oil is burned in B007-B009, visible emission checks are conducted.   |
| B001, B007-B010, B017, B018, B024, B030, B031,   | 0.020 lb per MMBtu of actual heat input when burning              | 17-10(B)(1) |              | N  | Y  | N | N  | N   | N | N  | N  | N  | N  |      | OR: The combustion of natural gas ensures compliance with the PE limitation.  |



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| B045-B048. | natural gas.   |             |  |   |   |   |   |   |   |   |   |   |   |  |   |
| B007-B009. | 1.52 lbs sulfur dioxide (SO <sub>2</sub> )/MMBtu of actual heat input.           | 18-37(W)    |  | N | Y | Y | N | N | Y | N | Y | N | N |  | OR: The sulfur and heat contents of oil burned are restricted to ensure compliance with the SO <sub>2</sub> emission limitation.  |
| B020.      | See comments section for emission limitations.                                   | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | 0.02 lb PE/MMBtu of actual heat input*<br>0.14 lb NO <sub>x</sub> /MMBtu of actual heat input*<br>0.20 lb SO <sub>2</sub> /MMBtu of actual heat input*<br>0.04 lb CO/MMBtu of actual heat input*<br>0.006 lb OC/MMBtu of actual heat input*<br><br>The lb(s)/MMBtu emission limitations are based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with this emission limitation. |
| B020.      | The annual operating hours for this emissions unit shall not exceed 1100 hrs/yr. | 31-05(A)(3) |  | N | N | Y | N | N | Y | N | Y | N | N |  |   |
| B042.      | See comments section for emission limitations.                                   | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | 0.02 lb PE/MMBtu of actual heat input*<br>0.14 lb NO <sub>x</sub> /MMBtu of actual heat input*<br>0.0006 lb SO <sub>2</sub> /MMBtu of actual heat input*<br>0.035 lb CO/MMBtu of actual heat input*<br>0.0058 lb OC/MMBtu of actual heat input*<br><br>0.59 TPY of PE*<br>13.31 TPY of NO <sub>x</sub> *<br>0.06 TPY of SO <sub>2</sub> *<br>3.33 TPY of CO*<br>0.55 TPY of PE*   |





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| F009. | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | <p>951 lbs NOx/hr*</p> <p>9.0 lbs PE/hr*</p> <p>83.2 lbs SO2/hr*</p> <p>200.0 lbs CO/hr*</p> <p>200 lbs OC/hr*</p> <p>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations.</p>  |
| F009. | See comments section for emission limitations. | 31-05(D)    |  | N | N | Y | N | N | Y | N | Y | N | N |  | <p>The following emission limitations shall not be exceeded:</p> <p>10.2 TPY PE, as a rolling, 12-month summation;</p> <p>21.2 TPY SO2, as a rolling, 12-month summation;</p> <p>58.4 TPY CO, as a rolling, 12-month summation;</p> <p>43.3 TPY OC, as a rolling, 12-month summation; and</p> <p>52.3 TPY NOx, as a rolling, 12-month summation.</p>  |
| F021. | See comments section for emission limitations. | 31-05(D)    |  | N | Y | Y | N | N | Y | N | Y | N | N |  | <p>OR: Compliance with the fuel usage restriction of 50,000 gallons per year, based on a rolling, 12-month summation ensures compliance with the emission limitations noted below.</p> <p>The following emission limitations shall not be exceeded:</p> <p>0.042 TPY PE, as a rolling, 12-month summation;</p> <p>0.133 TPY SO2, as a rolling, 12-month summation;</p> <p>2.32 TPY CO, as a rolling, 12-month summation;</p> <p>0.17 TPY OC, as a rolling, 12-month</p> |



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|   |  |             |  |   |   |   |   |   |   |   |   |   |   |  | summation; and<br>3.82 TPY NOx, as a rolling, 12-month summation.   |
| F021.   | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | 0.013 lb PE/MMBtu of actual heat input*<br>1.24 lbs NOx/MMBtu of actual heat input*<br>0.043 lb SO2/MMBtu of actual heat input*<br>0.753 lb CO/MMBtu of actual heat input*<br>0.054 lb OC/MMBtu of actual heat input*<br><br>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations. |
| B026, B027, B028, B029, B043, B044, F019, and F020. | See comments section for emission limitations. | 31-05(D)    |  | N | N | Y | N | N | Y | N | Y | N | N |  | The maximum total annual emissions from emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:<br><br>39.9 tons per year NOx;<br>99.9 tons per year CO;<br>19.8 tons per year OC;<br>9.76 tons per year PE/PM10;and<br>2.49 tons per year SO2.   |
| F019 and F020.                                      | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | 5.0 lbs NOx/MMBtu*<br>0.44 lb SO2/MMBtu*<br>7.4 lbs CO/MMBtu*<br>3.13 lb OC/MMBtu*<br>0.71 lb PE/PM10/MMBtu*<br><br>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these  |



|                |  |             |  |   |   |   |   |   |   |   |   |   |   |  | emission limitations.   |
|----------------|--|-------------|--|---|---|---|---|---|---|---|---|---|---|--|---|
| F014 and F015. | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N | N  | <p>NOx emissions shall not exceed 5.0 pounds per MMBtu of actual heat input*.</p> <p>CO emissions shall not exceed 7.40 pounds per MMBtu of actual heat input*.</p> <p>OC emissions shall not exceed 3.13 pounds per MMBtu of actual heat input*.</p> <p>PE/PM10 emissions shall not exceed 0.71 pound per MMBtu of actual heat input*.</p> <p>SO2 emissions shall not exceed 0.44 pound per MMBtu of actual heat input*.</p> <p>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.</p> |
| F014 and F015. | See comments section for emission limitations. | 31-05(D)    |  | N | N | Y | N | N | Y | N | Y | N | N | <p>The maximum total annual emissions from emissions units F014 and F015, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:</p> <p>44.27 tons per year of NOx;</p> <p>11.27 tons per year of CO;</p> <p>2.06 tons per year of OC;</p> <p>3.88 tons per year of PE/PM10; and</p> <p>7.57 tons per year of SO2.</p>                          |   |
| B053.          | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N | <p>0.0076 lb of PM/PM10/MMBtu of actual heat input*</p> <p>0.0006 lb of SO2 /MMBtu of actual heat input*</p> <p>0.06 lb of NOx/MMBtu of actual heat input*</p> <p>0.57 lb of CO/MMBtu of actual heat input*</p> <p>0.03 lb of VOC/MMBtu of actual heat input*</p> <p>* These emission limitations are based upon the emissions unit's potential to emit. Therefore, there is no need for any</p> |   |



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|       |  |             |  |   |   |   |   |   |   |   |   |   |   |  | monitoring, record keeping, and reporting to ensure compliance with the visible emission limitations.  |
| B053  | See comments section for emission limitations. | 31-05(A)(3) |  | N | Y | Y | N | N | Y | N | Y | N | N |  | <p>OR: Compliance with the annual operating hour's limitation of 1,125 per year based upon a rolling, 12-month summation ensures compliance with the emission limitations noted below.</p> <p>The following emission limitations shall not be exceeded, based upon a rolling, 12-month summation:</p> <p>0.51 ton per year NOx;<br/>         5.0 tons per year CO;<br/>         0.27 ton per year OC;<br/>         0.07 ton per year PE/PM10; and<br/>         .01 ton per year SO2.</p>               |
| B054. | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | <p>0.0076 lb of PM/PM10/MMBtu of actual heat input*</p> <p>0.0006 lb of SO2 /MMBtu of actual heat input*</p> <p>0.04 lb of NOx/MMBtu of actual heat input*</p> <p>0.38 lb of CO/MMBtu of actual heat input*</p> <p>0.02 lb of VOC/MMBtu of actual heat input*</p> <p>* These emission limitations are based upon the emissions unit's potential to emit. Therefore, there is no need for any monitoring, record keeping, and reporting to ensure compliance with the visible emission limitations.</p> |
| B054  | See comments section for emission limitations. | 31-05(A)(3) |  | N | Y | Y | N | N | Y | N | Y | N | N |  | <p>OR: Compliance with the annual operating hour's limitation of 950 per year based upon a rolling, 12-month summation ensures compliance with the emission limitations noted below.</p> <p>The following emission limitations shall not be exceeded, based upon a rolling, 12-month summation:</p>  |



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|  |  |             |  |   |   |   |   |   |   |   |   |   |   |  | 0.46 ton per year NOx;<br>5.0 tons per year CO;<br>0.32 ton per year VOC;<br>0.10 ton per year PE/PM10; and<br>0.01 ton per year SO2.  |
| B026, B027, B028, B029, B043, B044, F019, and F020 | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | 0.10 lb of NOx/MMBtu of actual heat input*<br>0.08 lb of CO/MMBtu actual heat input*<br>0.011 lb of VOC/MMBtu of actual heat input*<br>0.002 lb of PE/PM10/MMBtu of actual heat input*<br>0.0006 lb of SO2/MMBtu of actual heat input*<br>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.                                    |
| B011-B016  | See comments section for emission limitations. | 31-05(D)    |  | N | Y | Y | N | N | Y | N | Y | N | N |  | OR: Compliance with the annual fuel usage restriction of 260.9 million cubic feet, based upon a rolling, 12-month summation ensures compliance with the emission limitations noted below.<br><br>The total combined emissions for emissions units B011, B012, B013, B014, B015 and B016 shall not exceed the following based on a rolling, 12-month summation:<br>15.67 TPY PE/PM10;<br>93.05 TPY NOx;<br>119.71 TPY CO;<br>41.15 TPY VOC; and<br>33.39 TPY SO2. |
| B014-B016  | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | N | N | N | N | N | N | N | N |  | 0.0095 lb PE/PM10/MMBtu*<br>2.27 lbs NOx/MMBtu*<br>3.51 lbs CO/MMBtu*<br>0.36 lb VOC/MMBtu*<br>0.0006 lb SO2/MMBtu*  |



|                      |  |             |                      |   |   |   |   |   |   |   |   |   |   |  |   |
|----------------------|--|-------------|----------------------|---|---|---|---|---|---|---|---|---|---|--|---|
|                      |  |             |                      |   |   |   |   |   |   |   |   |   |   |  | *The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.   |
| B014-B016            | The concentration of formaldehyde shall not exceed 10.3 ppmvd at 15 percent O <sub>2</sub> .   |             | Part 63 Subpart ZZZZ | N | N | Y | N | N | Y | N | Y | N | Y |  |   |
| P231, P234, and P235 | The total combined hours of operation for P231, P234, and P235 emissions unit shall not exceed 1,584 hours per year based on a rolling, 365 day summation. | 31-05(D)    |                      | N | Y | Y | N | N | Y | N | Y | N | N |  |   |
| P231, P234, and P235 | See comments section for emission limitations.   | 31-05(A)(3) |                      | N | N | N | N | N | N | N | N | N | N |  | 49.1 lbs NO <sub>x</sub> /hr*<br>0.25 lb PE/MMBtu**<br>8.0 lbs SO <sub>2</sub> /hr*<br>9.6 lbs CO/hr*<br>1.6 lbs OC/hr*<br>0.062 lb PE/MMBtu of actual heat input*<br><br>*These emission limitations are based or the same as the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations. |



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| P231, P234, and P235        | See comments section for emission limitations.                      |             | Part 63 Subpart ZZZZ | N | N | Y | N | N | Y | N | Y | N | Y |  | The CO concentration in the stationary RICE exhaust shall not exceed 23 ppmvd at 15% O <sub>2</sub> ; or<br>Reduce CO emissions by 70 percent or more.   |
| B011-B013                   | See comments section for emission limitations.                      | 31-05(A)(3) |                      | N | N | N | N | N | N | N | N | N | N |  | 0.0104 lb PE/PM10/MMBtu*<br>0.656 lb NO <sub>x</sub> /MMBtu*<br>0.146 lb CO/MMBtu*<br>0.0042 lb VOC/MMBtu*<br>0.033 lb SO <sub>2</sub> /MMBtu.*<br><br>*These emission limitations are based on the same as the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations. |
| K030, K032, K033, and K034. | OC emissions shall not exceed 2.5 TPY, including cleanup materials. | 31-05(A)(3) |                      | N | N | Y | N | N | Y | N | Y | N | N |  |  |
| K030, K032, K033, and K034. | See comments section for emission limitations.                      | 31-05(A)(3) |                      | N | N | N | N | N | N | N | N | N | N |  | PE/PM10 shall not exceed 0.01 pound per hour and 0.03 ton per year.*<br>*The PE/PM10 emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.  |
| K030, K032, K033, and K034. | See comments section for emission limitations.                      | 21-07(G)(2) |                      | N | N | Y | N | N | Y | N | Y | N | N |  | OC emissions shall not exceed 8 pounds per hour and 40 pounds per day, including cleanup materials   |
| K030, K032, K033, and K034. | See comments section for emission limitations.                      | 31-05(A)(3) |                      | N | N | Y | N | N | Y | N | Y | N | N |  | The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.   |



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| K030, K032, K033, and K034. | See comments section for emission limitations. | 31-05(A)(3) |  | N | N | Y | N | N | Y | N | Y | N | N |  | The OC content as applied, of each cleanup material employed shall not exceed 8.2 pounds of OC per gallon of cleanup material. |
|-----------------------------|--|-------------|--|---|---|---|---|---|---|---|---|---|---|--|--|





**DRAFT**

**Division of Air Pollution Control**  
**Title V Permit**  
for  
General Electric Aircraft Engines, Evendale Plant

|                |                                   |
|----------------|-----------------------------------|
| Facility ID:   | 1431150060                        |
| Permit Number: | P0099305                          |
| Permit Type:   | Renewal                           |
| Issued:        | 7/26/2011                         |
| Effective:     | To be entered upon final issuance |
| Expiration:    | To be entered upon final issuance |





Division of Air Pollution Control
Title V Permit
for
General Electric Aircraft Engines, Evendale Plant

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## Authorization

Facility ID: 1431150060  
Facility Description: Manufactures aircraft engines  
Application Number(s): A0030999, A0031000, A0031001, A0031002  
Permit Number: P0099305  
Permit Description: Renewal Title V permit for General Electric Aircraft Engines, Evendale Plant, which includes a number of jet engine test cells, process heaters, both emergency engines and generators, spray booth painting operations, storage tanks, solvent cleaning operations, polymer cure and ceramic operations.  
Permit Type: Renewal  
Issue Date: 7/26/2011  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Superseded Permit Number: P0099304

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

General Electric Aircraft Engines, Evendale Plant  
One Neumann Way  
Cincinnati, OH 45215

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660  
(513)946-7777

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Hamilton County Dept. of Environmental Services. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally  
Director



## **A. Standard Terms and Conditions**

**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

*(Authority for term: ORC 3704.036(A))*

**2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule,

all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Hamilton County Dept. of Environmental Services.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### 3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*



#### **4. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

#### **5. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

#### **6. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

#### **7. General Requirements**

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.

- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- (1) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when: the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

## **9. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

## **10. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which

the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

## **11. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **12. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

*(Authority for term: OAC rule 3745-77-07(B))*

## **13. Compliance Requirements**

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (2) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. An identification of each term or condition of this permit that is the basis of the certification.
    - b. The permittee's current compliance status.
    - c. Whether compliance was continuous or intermittent.
    - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

#### 14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

#### 15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

#### 16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*

#### 17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:



- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

*(Authority for term: OAC rule 3745-77-07(I))*

## **18. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

## **19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

## **20. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**21. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*



**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be 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. Such records may be maintained in computerized form.

**25. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

*(Authority for term: OAC rule 3745-77-07(C))*

**26. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air



agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**27. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

**28. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

## **B. Facility-Wide Terms and Conditions**



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. The following insignificant emissions units are located at this facility:

| EU ID | Emissions unit Description                              |
|-------|---|
| B051  | 1.3 MMBtu/hr Air Preheater EA-298 (previously Z035)     |
| B052  | 6.4 MMBtu/hr Air Preheater EA-299 (previously Z036)     |
| F012  | Component Test Cell 54                                  |
| L045  | Non-halogenated Solvent Cold Cleaner                    |
| L070  | Non-halogenated Solvent Cold Cleaner                    |
| L079  | Non-halogenated Solvent Cold Cleaner                    |
| L102  | Non-halogenated Solvent Cold cleaner (previously Z098)  |
| P001  | 1 MMBtu/hour Melt Furnace                               |
| P043  | Parts preparation for aluminizing                       |
| P051  | Grit Blast Cabinets (2)                                 |
| P086  | Walk-in grit blast booths (2)                           |
| P110  | Cutter grind  |
| P111  | Cutter grind  |
| P200  | Walk-in grit blast booth                                |
| P255  | Emergency Engine for Stormwater Pump (Bldg. 422)        |
| P256  | Emergency Engine for Stormwater Pump (Bldg. 422)        |
| P257  | Emergency engine for air compressor (Bldg. 417)         |
| P258  | Emergency engine for stormwater pump (Bldg. 423)        |
| P259  | Emergency engine for stormwater pump (Bldg. 423)        |
| P260  | Emergency engine for stormwater pump (Bldg. 423)        |
| P261  | Emergency generator for boiler interlocks (Bldg. 400)   |
| P262  | Emergency generator for boiler control room (Bldg. 421) |
| P266  | Emergency engine for wastewater pump (Pumphouse P)      |
| P267  | Emergency engine for wastewater pump (Pumphouse P)      |
| P268  | Emergency engine for wastewater pump (Pumphouse P)      |
| P269  | Emergency generator for water plant (Bldg. B-2)         |
| P270  | Emergency generator for computers (Bldg. B)             |
| P271  | Emergency generator (33-kW)                             |
| P272  | Emergency generator (30-kW, Bldg. 704)                  |
| P273  | Emergency generator for stormwater pumps                |
| P274  | Groundwater Air-Stripper EA-487 (PTI P0104631)          |
| P282  | 286-Hp diesel-fired emergency firewater pump (EA-496)   |
| P275  | 210 HP Emergency Generator EA-488                       |



|      |   |
|------|---|
| P277 | R&D lab electric furnaces & equipment (previously Z074) |
| P278 | Carpentry shop (previously Z082)                        |
| P279 | Box shop (previously Z083)                              |
| T003 | 250,000-gallon fuel AGST                                |
| T004 | 567,000-gallon fuel AGST                                |
| T005 | 567,000-gallon fuel AGST                                |
| T006 | 567,000-gallon fuel AGST                                |
| T012 | 250,000-gallon fuel AGST (14-0734)                      |
| T037 | 1,000,000-gallon fuel oil AGST                          |

- a) Each insignificant emissions unit at this facility must comply with all applicable Ohio EPA and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

3. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

| EU ID | Emissions unit Description  |
|-------|---|
| F001  | Lime unloading, including pneumatic conveyor, storage bins, and fabric filter |
| F002  | Paved and Unpaved Roadways and Parking Areas                                  |
| G004  | Gasoline/diesel dispensing facility (EA-047-A)                                |
| K010  | Paint Spray Operation   |
| K019  | Adhesive Spray Booths (3)   |
| K024  | Fluorescent penetrant application   |
| K026  | Paint Spray Application   |
| K028  | Paint spray booth   |
| K035  | Sermetel coating booth (previously Z101)                                      |
| L098  | Solvent spray booth   |
| N002  | Classified materials incinerator  |
| P023  | Grinding Benches (7)  |
| P056  | Thermal spray application   |
| P057  | Chemical Vapor Deposition   |
| P081  | Ceramic slurry spray booth and robotic spray gun                              |
| P095  | MPED fluidized bed  |
| P100  | Automated plasma/thermal spray application                                    |
| P102  | Chemical line, includes 8 tanks   |
| P105  | Composite press and cure  |



|      |   |
|------|---|
| P107 | Ceramic tape-casting                                  |
| P108 | Metallography etching                                 |
| P113 | Grit blast  |
| P117 | Heat treat/advanced heat treat lab                    |
| P123 | CVD fluidized-bed/retort furnace                      |
| P125 | Sludge volume reducer                                 |
| P139 | MPED bearings & fuels (torque/tension) lab            |
| P144 | MPED R&D chemistry labs                               |
| P145 | Ceramic slurry formulation                            |
| P146 | MPED shape-molding operation                          |
| P150 | Polymeric cure/ceramics composites lab                |
| P163 | Automated grit blast system                           |
| P164 | Ceramic/Polymeric Cure                                |
| P166 | Ceramic Sintering Operation                           |
| P168 | Polymeric Curing Operation                            |
| P180 | grit blast  |
| P186 | Grit blast  |
| P187 | Grit blast  |
| P193 | Abrasive cutoff & sanding                             |
| P224 | Chemical line, small                                  |
| P225 | Titanium saw room                                     |
| P228 | Small carpentry shop                                  |
| P236 | Autoclave   |
| P238 | Cure ovens (2)  |
| P276 | High-speed component testing EA-424 (previously Z070) |
| P280 | Vitro-Klene process (previously Z090)                 |
| P281 | Vacuum gas carburization (previously Z093)            |
| P274 | Groundwater Air-Stripper EA-487                       |
| P282 | 286-Hp diesel-fired emergency firewater pump (EA-496) |
| T012 | 250,000-gallon fuel AGST                              |

4. **40 CFR Part 63 Subpart GG—National Emission Standards for Aerospace Manufacturing and Rework Facilities (Facility-Wide Terms and Conditions B.4-B.13)**

b) Each new or existing cleaning operation at this facility is subject to 40 CFR Part 63, Subpart GG—National Emission Standards for Aerospace Manufacturing and Rework Facilities. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart GG—National Emission Standards for Aerospace Manufacturing and Rework Facilities. The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart GG. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart GG and Subpart A.

5. For each new or existing cleaning operation subject to 40 CFR Part 63, Subpart GG, the permittee shall comply with the requirements below unless the cleaning solvent used is identified in 40 CFR 63.744 Table 1, or contains HAP or VOC below the de minimis levels specified in 40 CFR 63.741(f):
  - a) place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton tipped swabs used for very small cleaning operations are exempt from this requirement;
  - b) store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers; and
  - c) conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.
6. For each new or existing hand-wipe cleaning operation (excluding cleaning of spray gun equipment) subject to 40 CFR Part 63, Subpart GG, the permittee shall use cleaning solvents that meet one of the requirements specified in (a), (b) or (c) below. Solvent cleaning solutions that contain HAP and VOC below the de minimis levels specified in 40 CFR 63.741(f), and cleaning operations identified in 40 CFR 63.744(e) are exempt from these requirements:
  - a) meet one of the composition requirements in 40 CFR 63.744 Table 1;
  - b) have a composite vapor pressure of 45 mm Hg (24.1 in. H<sub>2</sub>O) or less at 20 degrees C (68 degrees F); or
  - c) demonstrate that the volume of hand-wipe cleaning solvents used in cleaning operations has been reduced by at least 60 percent from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by Ohio EPA. The alternative plan shall be submitted by Ohio EPA under section 112(l) of the Federal Clean Air Act and approved by the Administrator of the U.S. EPA, and shall demonstrate that the 60 percent volume reduction in cleaning solvents provides equivalent reductions to the requirements in paragraphs 6.a) and 6.b) above.
7. Spray gun cleaning. Each owner or operator of a new or existing spray gun cleaning operation subject to this subpart in which spray guns are used for the application of coatings or any other materials that require the spray guns to be cleaned shall use one or more of the techniques, or their equivalent, specified in paragraphs 7.a) through 7.d) of this section. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in 40 CFR 63.741(f) are exempt from the requirements in paragraphs 7.a) through 7.d) of this section.

- a) Enclosed system:
    - (1) clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun; and
    - (2) if leaks are found during the monthly inspection required in 40 CFR 63.751(a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed, and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.
  - b) nonatomized cleaning. Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use;
  - c) disassembled spray gun cleaning. Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components; and
  - d) atomizing cleaning. Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.
8. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of 7.a) through 7.d) of this section.
  9. For each new or existing flush cleaning operation subject to 40 CFR Part 63, Subpart GG (excluding those in which a solvent identified in 40 CFR 63.744 Table 1, or a semi-aqueous cleaning solvent is used), the permittee shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control.
  10. Except as provided for in 40 CFR 63.741(e), the permittee shall conduct the handling and transfer of waste containing HAP to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.
  11. For each new or existing cleaning operation subject to 40 CFR Part 63, Subpart GG, the permittee shall record the information listed below, as appropriate:
    - a) the name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for the affected cleaning operations at the facility;
    - b) for each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in 40 CFR 63.744(b)(1), or for semi-aqueous cleaning solvents used for flush cleaning operations:

- (1) the name of each cleaning solvent used;
    - (2) all data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and
    - (3) annual records of the volume of each solvent used, as determined from facility purchase records or usage records.
  - c) for each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR 63.744(b)(1), but does comply with the vapor pressure requirements in 40 CFR 63.744(b)(2):
    - (1) the name of each cleaning solvent used;
    - (2) the composite vapor pressure of each cleaning solvent used;
    - (3) all vapor pressure test results, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and
    - (4) the amount (in gallons) of each cleaning solvent used each month at each operation.
  - d) for each cleaning solvent used for the exempt hand-wipe cleaning operations specified in 40 CFR 63.744(e) that does not conform to the vapor pressure or composition requirements of 40 CFR 63.744(b):
    - (1) the identity and amount (in gallons) of each cleaning solvent used each month at each operation; and
    - (2) a list of the processes set forth in 40 CFR 63.744(e) to which the cleaning operation applies.
12. A record of all leaks from enclosed spray gun cleaners identified pursuant to 40 CFR 63.751(a) that includes for each leak found:
- a) source identification;
  - b) date leak was discovered; and
  - c) date leak was repaired.
13. The permittee shall submit semiannual reports, these reports shall be submitted every 6 months from the date of the notification of compliance status. Following the initial compliance report, each subsequent report shall cover the reporting period from January 1 through June 30 and July 1 through December 31. The Semiannual Compliance Reports must be postmarked or delivered no later than July 31 and January 31. The semi-annual report shall contain the following information:
- a) any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;



- b) a list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in 40 CFR 63.744(b)(1);
  - c) any instance where a noncompliant spray gun cleaning method is used;
  - d) any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and
  - e) if the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.
14. The permittee shall maintain, service, repair, or dispose of equipment containing any class I or class II substance used as refrigerant in such equipment pursuant to the applicable provisions of 40 CFR Part 82.
15. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.
16. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
17. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.
18. The following abbreviations are used throughout this permit.
- Nitrogen Oxides = NOx
  - Carbon Monoxide =CO
  - Organic Compounds = OC
  - Volatile Organic Compounds = VOC
  - Particulate emissions = PE
  - Particulate emissions and Particulate matter less than 10 microns in diameter = PE/PM10
  - Sulfur dioxide =SO2
  - Hazardous Air Pollutant = HAP
  - Tons per year = TPY

MM = Million

CFR = Code of Federal Regulations

OAC = Ohio Administrative Code

## C. Emissions Unit Terms and Conditions



**1. B007, EA-019-B**

**Operations, Property and/or Equipment Description:**

142 MMBtu/hour natural gas and No. 6 fuel oil-fired boiler

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures  |
|----|--|--|
| a. | OAC rule 3745-17-07(A)   | Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.                     |
| b. | OAC rule 3745-17-10(C)(1)  | 0.13 lb PE/MMBtu of actual heat input when burning No.6 fuel oil.  |
| c. | OAC rule 3745-17-10(B)(1)  | When burning only natural gas, the PE from this emissions unit shall not exceed 0.020 lb per MMBtu of actual heat input.   |
| d. | OAC rule 3745-18-37(W)   | 1.52 lbs sulfur dioxide (SO <sub>2</sub> )/MMBtu of actual heat input.   |
| e. | OAC rule 3745-18-06(A)   | The lbs SO <sub>2</sub> /MMBtu emission limitation above shall not apply to this emissions unit when burning only natural gas as defined in OAC rule 3745-18-01. |
| f. | 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. | See b)(2)a.  |

## (2) Additional Terms and Conditions

- a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

## c) Operational Restrictions

- (1) The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-18-37(W))

## d) Monitoring and/or Recordkeeping Requirements

- (1) When burning No.6 fuel oil, the permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-17-07(A)(1))

- (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745 18 04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745 18 04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

Authority for Term: (OAC rules 3745-77-07(C)(1), 3745-18-04(E)(3), and 3745-18-04(I))

e) Reporting Requirements

- (1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from d)(2) above. The notification shall include a copy of such record and shall be sent to the



Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-18-37)

- (2) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

Authority for term: (OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.52 lbs/MMBtu.

Applicable Compliance Method:

Continuous compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received, or each daily composite sample of the oil burned during each calendar day, meets the limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-18-04(E))

- b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part



60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rule 3745-77-07(C)(1) and OAC rules 3745-17-03(B)(1))

c. Emission Limitation:

0.13 lb PE/MMBtu of actual heat input when burning No.6 fuel oil.

Applicable compliance method when burning number six fuel oil:

For the use of number six fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 10 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while firing number six fuel oil.

d. Emission Limitation:

0.020 lb PE/MMBtu of actual heat input when burning only natural gas.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while firing only natural gas.

Authority for Term: (OAC rules 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.



2. B020, EA-217

Operations, Property and/or Equipment Description:

37.5 MMBtu/hour natural gas, indirect-fired air preheater

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures   |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-02236) | 0.02 lb PE/MMBtu of actual heat input*<br>0.14 lb NOx/MMBtu of actual heat input*<br>0.20 lb SO2/MMBtu of actual heat input*<br>0.04 lb CO/MMBtu of actual heat input*<br>0.006 lb OC/MMBtu of actual heat input*<br><br>The lb(s)/MMBtu emission limitations are based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with this emission limitation.<br><br>See c)(1).<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |
| b. | OAC rule 3745-17-07(A)                      | Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.   |



Table with 3 columns: ID (c, d, e), Reference (OAC rule 3745-17-10(B)(1), OAC rule 3745-18-06(A), 40 CFR Part 63, Subpart DDDDD), and Description (Emission limitation, Fuel burning equipment exemptions, National Emission Standards for Hazardous Air Pollutants).

(2) Additional Terms and Conditions

a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

(1) The annual operating hours for this emissions unit shall not exceed 1100 hrs/yr.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

(2) The permittee shall burn only natural gas in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record monthly records of the following information:

a. the total operating hours for this emissions unit for the current month; and

b. the year-to-date total operating hours for this emissions unit.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-02236: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports for any exceedance of the hours of operation restriction noted in c)(1).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-02236 e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.02 lb PE/MMBtu of actual heat input;

0.14 lb NOx/MMBtu of actual heat input;

0.20 lb SO<sub>2</sub>/MMBtu of actual heat input;

0.04 lb CO/MMBtu of actual heat input; and

0.006 lb OC/MMBtu of actual heat input.

Applicable Compliance Method:

The lb/MMBtu emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-02336.

If required, the permittee shall demonstrate compliance with these emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rules 3745-77-07(C)(1) and OAC rules 3745-17-03(B)(1))

c. Compliance with the annual operating hour's limitation shall be based upon the record keeping in d)(1).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-02236: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



**3. B042, EA-381**

**Operations, Property and/or Equipment Description:**

21.7 MMBtu/hour natural gas, indirect-fired air preheater

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-03714) | 0.02 lb PE/MMBtu of actual heat input*<br>0.14 lb NOx/MMBtu of actual heat input*<br>0.0006 lb SO2/MMBtu of actual heat input*<br>0.035 lb CO/MMBtu of actual heat input*<br>0.0058 lb OC/MMBtu of actual heat input*<br><br>0.59 TPY of PE*<br>13.31 TPY of NOx*<br>0.06 TPY of SO2*<br>3.33 TPY of CO*<br>0.55 TPY of PE*<br><br>*The lb(s)/MMBtu and TPY emission limitations are based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with this emission limitation.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |
| b. | OAC rule 3745-17-07(A)                      | Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.  |



Table with 3 columns: ID (c, d, e), Reference (OAC rule 3745-17-10(B)(1), OAC rule 3745-18-06(A), 40 CFR Part 63, Subpart DDDDD), and Description (The emission limitation established under this regulation is the same as or less stringent than that established under OAC rule 3745-31-05(A)(3)., Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned., See b)(2)a.)

(2) Additional Terms and Conditions

a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-03714: d)(1). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this

operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-03714: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.02 lb PE/MMBtu of actual heat input;

0.14 lb NO<sub>x</sub>/MMBtu of actual heat input;

0.0006 lb SO<sub>2</sub>/MMBtu of actual heat input;

0.035 lb CO/MMBtu of actual heat input;

0.0058 lb OC/MMBtu of actual heat input;

0.59 TPY of PE;

13.31 TPY of NO<sub>x</sub>;

0.06 TPY of SO<sub>2</sub>;

3.33 TPY of CO; and

0.55 TPY of PE.

Applicable Compliance Method:

The lb/MMBtu emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-03714. The TPY emission limitations are based on the



following equation: (lb/MMBtu emission factor x 21.7 MMBtu/Hr X 8760 hours/year)/2000 lbs per ton.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rules 3745-77-07(C)(1) and OAC rules 3745-17-3(B)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-03714: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



4. B048, EA-382

Operations, Property and/or Equipment Description:

185 MMBtu/hour natural gas, indirect-fired air preheater

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(D) (PTI 14-04157) with limitations of 55.5 lbs NOx/hr\* and 39.5 TPY NOx. Row b: OAC rule 3745-31-05(A)(3) (PTI 14-04157) with limitations for SO2, CO, and OC.



|    | Applicable Rules/Requirements   | Applicable Emissions Limitations/Control Measures   |
|----|---|---|
| c. | OAC rule 3745-17-07(A)  | Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.   |
| d. | OAC rule 3745-17-10(B)(1)   | 0.020 lb PE/MMBtu of actual heat input.   |
| e. | OAC rule 3745-18-06(A)  | Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned. |
| f. | 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This emissions unit is an existing unit designed to burn natural gas, refinery gas or other gas 1 fuels. | See b)(2)b.   |

(2) Additional Terms and Conditions

a. The following emission limitations shall not be exceeded:

2.63 TPY PE/PM-10, as a rolling, 12-month summation;

0.08 TPY SO<sub>2</sub>, as a rolling, 12-month summation;

23.1 TPY CO, as a rolling, 12-month summation; and

0.22 TPY OC, as a rolling, 12-month summation.

b. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The total hours of operation for this emissions unit shall not exceed 1,423 hours per year based on a rolling, 12-month summation.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(A)(1))

- (2) The permittee shall burn only natural gas in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information on a monthly basis:

- a. the total operating hours for this emissions unit; and
- b. the rolling, 12-month summation for operating hours for this emissions unit.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-04157: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month operating hour's limitation.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-04157: e)(1)-e)(2). The reporting requirements contained in the above-

referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

55.5 lbs NO<sub>x</sub>/hr.

Applicable Compliance Method:

The lb/hr emission limitation is based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-04157. The emission limitation is based on the following equation: 0.3 lb NO<sub>x</sub>/MMBtu emission factor x 185 MMBtu/Hr.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

32.5 lbs CO/hr.

Applicable Compliance Method:

The lbs/hr emission limitation is based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-04157. The emission limitation is based on the following equation: 0.176 lb CO/MMBtu emission factor x 185 MMBtu/Hr.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

c. Emission Limitation:

0.0006 lb SO<sub>2</sub>/MMBtu of actual heat input;

0.006 lb OC/MMBtu of actual heat input; and

0.020 lb PE/MMBtu of actual heat input.

Applicable Compliance Method:

The lb/MMBtu emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-04157.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

d. Emission Limitation:

39.5 TPY NO<sub>x</sub> based on a rolling, 12-month summation;

2.63 TPY PE/PM-10, as a rolling, 12-month summation;

0.08 TPY SO<sub>2</sub>, as a rolling, 12-month summation;

23.1 TPY CO, as a rolling, 12-month summation; and

0.22 TPY OC, as a rolling, 12-month summation.

Applicable Compliance Method:

The TPY emission limitations were based on the emissions units' hourly potential to emit multiplied by the hours of operation restriction in c)(1). Compliance with the hours of operational restriction, ensures compliance with the TPY emission limitations.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05))

e. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rules 3745-77-07(C)(1) and OAC rules 3745-17-3(B)(1))

f. Compliance with the annual operating hour's limitation shall be based upon the record keeping in d)(2).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))



- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04157: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.
  
- g) Miscellaneous Requirements
  - (1) None.



**5. F009, EA-015-G**

**Operations, Property and/or Equipment Description:**

Engine and Component Test Cell 46

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    |   |   |
|----|---|---|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-04488)    | See b)(2)c.   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-04488) | 951 lbs NOx/hr*<br>9.0 lbs PE/hr*<br>83.2 lbs SO2/hr*<br>200.0 lbs CO/hr*<br>200 lbs OC/hr*<br><br>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). |
| c. | OAC rule 3745-17-11(A)(1)(m)                | As provided for in OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from the particulate emission (PE) limitations of OAC rule 3745-17-11.   |
| d. | OAC rule 3745-17-07(A)                      | See b)(2)a.   |
| e. | OAC rule 3745-18-06(E)                      | See b)(2)b.   |



Table with 2 columns: Reference (f.) and Description (40 CFR Part 63, Subpart P P P P P Engine Test Cells/Standards. As defined in 40 CFR 63.9290, this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart P P P P P. As provided for under 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P P P P P.)

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
b. The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).
c. The following emission limitations shall not be exceeded:
i. 10.2 TPY PE, as a rolling, 12-month summation;
ii. 21.2 TPY SO2, as a rolling, 12-month summation;
iii. 58.4 TPY CO, as a rolling, 12-month summation;
iv. 43.3 TPY OC, as a rolling, 12-month summation; and
v. 52.3 TPY NOx, as a rolling, 12-month summation.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall calculate the NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions from each engine test at this emissions unit by employing either the "Fuel Flow or Time at 3-Band Throttle Settings" methods or the "Instantaneous Emissions Tracking" system developed by General Electric Aircraft Engines.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information monthly when the "Fuel Flow or Time at 3-Band Throttle Settings" methods for calculating NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions from an engine test are used:

- a. the type(s) and amount(s) of fuel used during each test;
- b. the total hours of engine testing;
- c. the total NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emitted during each test (by employing the predefined emission curves for the type of engine being tested); and
- d. the total monthly NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions, in tons (the summation of the emission totals contained in line c. for all tests performed during the month).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) The permittee shall collect and record the following information when the "Instantaneous Emissions Tracking" system for calculating NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions from an engine test is used:

- a. the type(s) and amount(s) of fuel used during each test;
- b. the total hours of engine testing;
- c. the total NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emitted during each test (by employing the predefined emission curves for the type of engine being tested); and
- d. the total monthly NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions, in tons (the summation of the emission totals contained in line c. for all tests performed during the month).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (4) The permittee shall collect and record the following information on a monthly basis:

- a. the total monthly emissions of NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE, in tons (the summation of the NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions recorded pursuant to d)(2) and d)(3) for each month); and

- b. the rolling, twelve-month summation of NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions (the current month's NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions added to the previous eleven monthly totals for NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE emissions).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-04488: d)(1)-d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports for any monthly record showing an exceedance of the rolling, twelve-month emission limitations for NO<sub>x</sub>, CO, OC, SO<sub>2</sub> and PE listed in b)(2)c.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-04488: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

- 10.2 TPY PE, as a rolling, 12-month summation;

- 21.2 TPY SO<sub>2</sub>, as a rolling, 12-month summation;

- 58.4 TPY CO, as a rolling, 12-month summation;

- 43.3 TPY OC, as a rolling, 12-month summation; and

- 52.3 TPY NO<sub>x</sub>, as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance shall be based upon the record keeping in d)(4).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

951 lbs NO<sub>x</sub>/hr;

9.0 lbs PE/hr;

83.2 lbs SO<sub>2</sub>/hr;

200.0 lbs CO/hr; and

200 lbs OC/hr.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with these emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04488: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.



**6. F021, EA-373**

**Operations, Property and/or Equipment Description:**

Engine and Component Test Cell A-11

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    |   |   |
|----|---|---|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-05321)    | See b)(2)c and c)(1).   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05321) | 0.013 lb PE/MMBtu of actual heat input*<br>1.24 lbs NOx/MMBtu of actual heat input*<br>0.043 lb SO2/MMBtu of actual heat input*<br>0.753 lb CO/MMBtu of actual heat input*<br>0.054 lb OC/MMBtu of actual heat input*<br><br>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). |
| c. | OAC rule 3745-17-11(A)(1)(m)                | As provided for in OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from the particulate emission (PE) limitations of OAC rule 3745-17-11.   |
| d. | OAC rule 3745-17-07(A)                      | See b)(2)a.   |
| e. | OAC rule 3745-18-06(E)                      | See b)(2)b.   |

|    |  |  |
|----|--|--|
| f. | 40 CFR Part 63 Subpart P P P P P Engine Test Cells/Stands. | As defined in 40 CFR 63.9290, this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart P P P P P. As provided for under 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P P P P P. |
|----|--|--|

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- b. The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).
- c. The following emission limitations shall not be exceeded:
  - i. 0.042 TPY PE, as a rolling, 12-month summation;
  - ii. 0.133 TPY SO<sub>2</sub>, as a rolling, 12-month summation;
  - iii. 2.32 TPY CO, as a rolling, 12-month summation;
  - iv. 0.17 TPY OC, as a rolling, 12-month summation; and
  - v. 3.82 TPY NO<sub>x</sub>, as a rolling, 12-month summation.



c) Operational Restrictions

- (1) The amount of jet fuel burned in this emissions unit shall not exceed 50,000 gallons per year, based on a rolling, 12-month summation.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information on a monthly basis:

- a. the total fuel usage, in gallons; and
- b. the total rolling, twelve-month summation for the amount of fuel used, in gallons.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05321: d)(1). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify each monthly record showing an exceedance of the fuel usage limitation specified in c)(1) of this permit.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05321: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
  - i. 0.042 TPY PE, as a rolling, 12-month summation;
  - ii. 0.133 TPY SO<sub>2</sub>, as a rolling, 12-month summation;

- iii. 2.32 TPY CO, as a rolling, 12-month summation;
- iv. 0.17 TPY OC, as a rolling, 12-month summation; and
- v. 3.82 TPY NOx, as a rolling, 12-month summation.

Applicable Compliance Method:

The TPY emission limitations were based on the emissions unit's potential to emit given the fuel usage restriction in c)(1). Compliance with the fuel usage restriction ensures compliance with the TPY emission limitations.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

0.013 lb PE/MMBtu of actual heat input;

1.24 lbs NOx/MMBtu of actual heat input;

0.043 lb SO<sub>2</sub>/MMBtu of actual heat input;

0.753 lb CO/MMBtu of actual heat input; and

0.054 lb OC/MMBtu of actual heat input.

Applicable Compliance Method:

The lb/MMBtu emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-05321.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

c. Compliance with the fuel usage restriction in c)(1), can be demonstrated by the recordkeeping in d)(1).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05321: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

- g) Miscellaneous Requirements
  - (1) None.



**7. Emissions Unit Group -Engine and component test cells: F019, F020,**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| F019         | Engine and Component Test Cell A-18                      |
| F020         | Engine and Component Test Cell A-19                      |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    |  |   |
|----|--|---|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-05794)               | See b)(2)c and c)(1).   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05794)            | 5.0 lbs NOx/MMBtu*<br>0.44 lb SO2/MMBtu*<br>7.4 lbs CO/MMBtu*<br>3.13 lb OC/MMBtu*<br>0.71 lb PE/PM10/MMBtu*<br><br>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 63 Subpart P. |
| c. | OAC rule 3745-17-11(A)(1)(m)                           | As provided for in OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from the particulate emission (PE) limitations of OAC rule 3745-17-11.   |
| d. | OAC rule 3745-17-07(A)                                 | See b)(2)a.   |
| e. | OAC rule 3745-18-06(E)                                 | See b)(2)b.   |
| f. | 40 CFR Part 63 Subpart P. Engine Test Cells/Standards. | As defined in 40 CFR 63.9290, this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart P. As provided for under  |

|  |  |   |
|--|--|---|
|  |  | 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P. |
|--|--|---|

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- b. The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).
- c. The maximum total annual emissions from emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:
  - i. 39.9 tons per year NOx;
  - ii. 99.9 tons per year CO;
  - iii. 19.8 tons per year OC;
  - iv. 9.76 tons per year PE/PM10;and
  - v. 2.49 tons per year SO2.

The annual emission limitations specified in this permit are based on the permittee's projected needs for testing engines in various ranges of operation. The permittee may adjust the number of hours of testing and fuel amounts used as long as the annual emission limitations specified in this permit are not exceeded.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall calculate the NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emissions from each engine test in this emissions unit by employing either the "Fuel Flow or Time at 3-Band Throttle Settings" method or the "Instantaneous Emissions Tracking" method developed by General Electric Aircraft Engines.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

- (2) The permittee shall collect and record the following information monthly when the "Fuel Flow or Time at 3-Band Throttle Settings" methods for calculating NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emissions from an engine test are used:

- a. the date each engine test was performed;
- b. the type of engine that was tested;
- c. the type(s) and amount(s) of fuel used during each test;
- d. the total hours of engine testing;
- e. the total NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emitted during each test (by employing the predefined emission curves for the type of engine being tested); and
- f. the total monthly NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emissions, in tons (the summation of the emission totals contained in line e for all tests performed during the month).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

- (3) The permittee shall collect and record the following information when the "Instantaneous Emissions Tracking" system for calculating NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emissions from an engine test is used:

- a. the date each engine test was performed;
- b. the type of engine that was tested;
- c. the type(s) and amount(s) of fuel used during each test;
- d. the total hours of engine testing;
- e. the total NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emitted during each test (by employing the predefined emission curves for the type of engine being tested); and

- f. the total monthly NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emissions, in tons (the summation of the emission totals contained in line e for all tests performed during the month).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

- (4) The permittee shall maintain monthly records of the following information in order to monitor compliance with the rolling, 12-month summation emission limitations:
  - a. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for this emissions unit;
  - b. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined, and
  - c. the updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05794: d)(1)-d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05794: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The maximum total annual emissions from emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:

- i. 39.9 tons per year NO<sub>x</sub>;
- ii. 99.9 tons per year CO;
- iii. 19.8 tons per year OC;
- iv. 9.76 tons per year PE/PM<sub>10</sub>;and
- v. 2.49 tons per year SO<sub>2</sub>.

Applicable Compliance Method:

Compliance with the TPY emission limitations may be demonstrated by the information collected and recorded in d)(2)-d)(4).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

- i. 5.0 lbs NO<sub>x</sub>/MMBtu;
- ii. 0.44 lb SO<sub>2</sub>/MMBtu;
- iii. 7.4 lbs CO/MMBtu;
- iv. 3.13 lb OC/MMBtu; and
- v. 0.71 lb PE/PM<sub>10</sub>/MMBtu.

Applicable Compliance Method:

The lb(s)/hr emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-05794.

If required, the permittee shall demonstrate compliance with the lb/hr emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

**Draft Title V Permit**

General Electric Aircraft Engines, Evendale Plant

**Permit Number:** P0099305

**Facility ID:** 1431150060

**Effective Date:** To be entered upon final issuance

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05794: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.

**8. Emissions Unit Group -Engine and component test cells: F014 and F015**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| F014         | Engine and Component Test Cell A-02                      |
| F015         | Engine and Component Test Cell A-03                      |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    |  |  |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05933)                                  | <p>NOx emissions shall not exceed 5.0 pounds per MMBtu of actual heat input*.</p> <p>CO emissions shall not exceed 7.40 pounds per MMBtu of actual heat input*.</p> <p>OC emissions shall not exceed 3.13 pounds per MMBtu of actual heat input*.</p> <p>PE/PM10 emissions shall not exceed 0.71 pound per MMBtu of actual heat input*.</p> <p>SO2 emissions shall not exceed 0.44 pound per MMBtu of actual heat input*.</p> <p>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 63 Subpart PPPPP.</p> |
| b. | OAC rule 3745-31-05(D)<br>(14-05933)<br>(Synthetic Minor to Avoid Prevention | See b)(2)c.  |

|    |  |  |
|----|--|--|
|    | of Significant Deterioration and Non-Attainment New Source Review) |  |
| c. | OAC rule 3745-17-11(A)(1)(m)                                       | As provided for in OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from the particulate emission (PE) limitations of OAC rule 3745-17-11.  |
| d. | OAC rule 3745-17-07(A)   | See b)(2)a.  |
| e. | OAC rule 3745-18-06(E)   | See b)(2)b.  |
| f. | 40 CFR Part 63 Subpart P P P P P Engine Test Cells/Stands.         | As defined in 40 CFR 63.9290, this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart P P P P P. As provided for under 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P P P P P. |

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- b. The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).
- c. The maximum total annual emissions from emissions units F014 and F015, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:
  - i. 44.27 tons per year of NO<sub>x</sub>;

- ii. 11.27 tons per year of CO;
  - iii. 2.06 tons per year of OC;
  - iv. 3.88 tons per year of PE/PM10; and
  - v. 7.57 tons per year of SO2.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall calculate the NOx, CO, OC, SO2, and PE/PM10 emissions from each engine test in this emissions unit by employing either the "Fuel Flow or Time at 3 Band Throttle Settings" method or the "Instantaneous Emissions Tracking" method developed by General Electric Aircraft Engines as described in Permit To Install application 14-05794, submitted December 12, 2005 for engine test cells.  
  
Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))
  - (2) The permittee shall collect and record the following information monthly when the "Fuel Flow or Time at 3 Band Throttle Settings" methods for calculating NOx, CO, OC, SO2, and PE/PM10 emissions from an engine test are used:
    - a. the date each engine test was performed;
    - b. the type of engine that was tested;
    - c. the type(s) and amount(s) of fuel used during each test;
    - d. the total hours of engine testing;
    - e. the total NOx, CO, OC, SO2, and PE/PM10 emitted during each test (by employing the predefined emission curves for the type of engine being tested); and
    - f. the total monthly NOx, CO, OC, SO2, and PE/PM10 emissions, in tons (the summation of the emission totals contained in line e for all tests performed during the month).  
Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))
  - (3) The permittee shall collect and record the following information when the "Instantaneous Emissions Tracking" system for calculating NOx, CO, OC, SO2, and PE/PM10 emissions from an engine test is used:
    - a. the date each engine test was performed;
    - b. the type of engine that was tested;

- c. the type(s) and amount(s) of fuel used during each test;
- d. the total hours of engine testing;
- e. the total NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emitted during each test (by employing the predefined emission curves for the type of engine being tested); and
- f. the total monthly NO<sub>x</sub>, CO, OC, SO<sub>2</sub>, and PE/PM<sub>10</sub> emissions, in tons (the summation of the emission totals contained in line e for all tests performed during the month).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (4) The permittee shall maintain monthly records of the following information in order to monitor compliance with the rolling, 12-month summation emission limitations:
  - a. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for this emissions unit,
  - b. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for emissions units F014 and F015, combined, and
  - c. the updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units F014 and F015, combined (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05933: d)(1)-d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify each monthly record showing an exceedance of the emission limitations specified in b)(2)c.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (2) The permittee shall submit annual reports that list the monthly emission totals and the rolling, 12-month summations for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units F014 and F015, combined. These reports shall be submitted by January 31 of each year and cover the previous calendar year's operation.

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05933: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The maximum total annual emissions from emissions units F014 and F015, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:

- i. 44.27 tons per year of NO<sub>x</sub>;
- ii. 11.27 tons per year of CO;
- iii. 2.06 tons per year of OC;
- iv. 3.88 tons per year of PE/PM<sub>10</sub>; and
- v. 7.57 tons per year of SO<sub>2</sub>.

Applicable Compliance Method:

Compliance with the emission limitations specified above shall be determined by the record keeping requirements specified in d)(1)-d)(4).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

- 5.0 pounds of NO<sub>x</sub> per MMBtu;
- 7.40 pounds of CO per MMBtu;
- 3.13 pounds of OC per MMBtu;
- 0.71 pound of PE/PM<sub>10</sub> per MMBtu; and
- 0.44 pound of SO<sub>2</sub> per MMBtu.

Applicable Compliance Method:

The emission limitations specified above are based upon the emissions unit's potential to emit, the permittee-supplied emission factors, and the operational parameters as provided in the PTI application 14-05933, submitted March 16, 2007.

If required, the permittee shall demonstrate compliance with these emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05933: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.

**9. Emissions Unit Group -Engine and component test cells: F003, F004, F005, F006, F007, F008, F010, F013, F016, F017, F018, P013, P014, P015, P016, P017, P018, P019, P020, P075**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| F003         | Engine and Component Test Cell 06                        |
| F004         | Engine and Component Test Cell 44                        |
| F005         | Engine and Component Test Cell 43                        |
| F006         | Engine and Component Test Cell 37                        |
| F007         | Engine and Component Test Cell 40                        |
| F008         | Engine and Component Test Cell 07                        |
| F010         | Engine and Component Test Cell 11                        |
| F013         | Engine and Component Test Cell A-01                      |
| F016         | Engine and Component Test Cell A-06                      |
| F017         | Engine and Component Test Cell 307                       |
| F018         | Engine and Component Test Cell 301                       |
| P013         | Engine and Component Test Cell 03                        |
| P014         | Engine and Component Test Cell 38                        |
| P015         | Engine and Component Test Cell 35                        |
| P016         | Engine and Component Test Cell 34                        |
| P017         | Engine and Component Test Cell 02                        |
| P018         | Engine and Component Test Cell 05                        |
| P019         | Engine and Component Test Cell 04                        |
| P020         | Engine and Component Test Cell 45                        |
| P075         | Engine and Component Test Cell A-05                      |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements                              | Applicable Emissions Limitations/Control Measures  |
|----|--|--|
| a. | OAC rule 3745-17-11(A)(1)(m)                               | As provided for in OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from the particulate emissions (PE) limitations of OAC rule 3745-17-11. |
| b. | OAC rule 3745-17-07(A)                                     | See b)(2)a.  |
| c. | OAC rule 3745-18-06(E)                                     | See b)(2)b.  |
| d. | 40 CFR Part 63 Subpart P P P P P Engine Test Cells/Stands. | As defined in 40 CFR 63.9290, this emissions unit is identified as an existing   |

|  | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures   |
|--|-------------------------------|---|
|  |                               | affected source under 40 CFR Part 63 Subpart P. As provided for under 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P. |

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- b. The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) None.

e) Reporting Requirements

- (1) None.

f) Testing Requirements

- (1) None.

- g) Miscellaneous Requirements
  - (1) None.

**10. Emissions Unit Group -Indirect-fired air preheater NG: B017, B018, B024, B030, B031, B045, B046, and B047.**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| B017         | 125 MMBtu/hour natural gas, indirect-fired air preheater |
| B018         | 28 MMBtu/hour natural gas, indirect-fired air preheater  |
| B024         | 164 MMBtu/hour natural gas, indirect-fired air preheater |
| B030         | 80 MMBtu/hour natural gas, indirect-fired air preheater  |
| B031         | 80 MMBtu/hour natural gas, indirect-fired air preheater  |
| B045         | 117 MMBtu/hour natural gas, indirect-fired air preheater |
| B046         | 117 MMBtu/hour natural gas, indirect-fired air preheater |
| B047         | 117 MMBtu/hour natural gas, indirect-fired air preheater |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures   |
|----|-------------------------------|---|
| a. | OAC rule 3745-17-07(A)        | Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.  |
| b. | OAC rule 3745-17-10(B)(1)     | The PE from this emissions unit shall not exceed 0.020 lb per MMBtu of actual heat input.   |
| c. | OAC rule 3745-18-06(A)        | Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned. |

|    |  |             |
|----|--|-------------|
| d. | 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. | See b)(2)a. |
|----|--|-------------|

(2) Additional Terms and Conditions

a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rule 3745-77-07(C)(1) and OAC rules 3745-17-03(B)(1))

b. Emission Limitation:

0.020 lb PE/MMBtu of actual heat input.

Applicable compliance method when burning only natural gas:

Compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

Authority for Term: (OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

**11. B053 - EA-433**

| EU ID | Operations, Property and/or Equipment Description   |
|-------|---|
| B053  | 15.5 MMBtu/hr natural gas direct-fired Turbine Rear Frame Cooler(EA-433) - permitted as EU Z079 in PTI 14-05563, issued 7/22/04 |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05563) | 0.0076 lb of PE/PM10/MMBtu of actual heat input*<br>0.0006 lb of SO2/MMBtu of actual heat input*<br>0.06 lb of NOx/MMBtu of actual heat input*<br>0.57 lb of CO/MMBtu of actual heat input*<br>0.03 lb of VOC/MMBtu of actual heat input*.<br><br>* These emission limitations are based upon the emissions unit's potential to emit. Therefore, there is no need for any monitoring, record keeping, and reporting to ensure compliance with these emission limitations.<br><br>See b)(2)a.<br><br>See c)(1). |
| b. | OAC rule 3745-17-11(A)                      | See b)(2)b.  |
| c. | OAC rule 3745-17-07(A)                      | See b)(2)c.  |
| d. | OAC rule 3745-18-06(A)                      | Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-  |

|    | Applicable Rules/Requirements                             | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
|    |   | 18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.   |
| e. | 40 CFR Part 63 Subpart P P P P P Engine Test Cells/Stand. | As defined in 40 CFR 63.9290, this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart P P P P P. As provided for under 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P P P P P. |

(2) Additional Terms and Conditions

- a. The following emission limitations shall not be exceeded, based upon a rolling, 12-month summation:
  - i. 0.51 ton per year NOx;
  - ii. 5.0 tons per year CO;
  - iii. 0.27 ton per year OC;
  - iv. 0.07 ton per year PE/PM10; and
  - v. 0.01 ton per year SO2.
- b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 1,125 per year based upon a rolling, 12-month summation of the operating hours.  
 Authority for Term: (OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1))
- (2) The permittee shall burn only natural gas in this emissions unit.  
 Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information on a monthly basis:
  - a. the total operating hours for this emissions unit; and
  - b. the rolling, 12-month operating hours for this emissions unit.

Authority for Term: (OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05563: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month operating hour's limitation.

Authority for Term: (OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05563: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.0076 lb of PE/PM10/MMBtu of actual heat input;

0.0006 lb of SO<sub>2</sub> /MMBtu of actual heat input;

0.06 lb of NO<sub>x</sub>/MMBtu of actual heat input;

0.57 lb of CO/MMBtu of actual heat input; and

0.03 lb of VOC/MMBtu of actual heat input.

Applicable Compliance Method:

The lb/MMBtu emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-05563.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitation:

0.51 ton per year NO<sub>x</sub>;

5.0 tons per year CO;

0.27 ton per year OC;

0.07 ton per year PE/PM10; and

0.01 ton per year SO<sub>2</sub>.

Applicable Compliance Method:

The TPY emission limitations were based on the emissions units' hourly potential to emit multiplied by the hours of operation restriction in c)(1). Compliance with the hours of operational restriction, ensures compliance with the TPY emission limitations.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05)

c. Compliance with the annual operating hour's limitation shall be based upon the record keeping in d)(2).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05)

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install

14-05563: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

**12. B054- EA-434**

| EU ID | Operations, Property and/or Equipment Description   |
|-------|---|
| B054  | 27.5 MMBtu/hr natural gas direct-fired Inflow Bleed Preheater (EA-434) - permitted as EU Z080 in PTI 14-05563, issued 7/22/04 |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures   |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05563) | 0.0076 lb of PE/PM10/MMBtu of actual heat input*<br>0.0006 lb of SO2 /MMBtu of actual heat input*<br>0.04 lb of NOx/MMBtu of actual heat input*<br>0.38 lb of CO/MMBtu of actual heat input*<br>0.02 lb of VOC/MMBtu of actual heat input*.<br><br>* These emission limitations are based upon the emissions unit's potential to emit. Therefore, there is no need for any monitoring, record keeping, and reporting to ensure compliance with these emission limitations.<br><br>See b)(2)a.<br><br>See c)(1). |
| b. | OAC rule 3745-17-11(A)                      | See b)(2)b.   |
| c. | OAC rule 3745-17-07(A)                      | See b)(2)c.   |
| d. | OAC rule 3745-18-06(A)                      | Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-   |

|    | Applicable Rules/Requirements                                 | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
|    |   | 18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.   |
| e. | 40 CFR Part 63 Subpart P P P P P Engine Test Cells/Standards. | As defined in 40 CFR 63.9290, this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart P P P P P. As provided for under 40 CFR 63.9290(b), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart P P P P P. |

(2) Additional Terms and Conditions

- a. The following emission limitations shall not be exceeded, based upon a rolling, 12-month summation:
  - i. 0.46 ton per year NO<sub>x</sub>;
  - ii. 5.0 tons per year CO;
  - iii. 0.32 ton per year VOC;
  - iv. 0.10 ton per year PE/PM<sub>10</sub>; and
  - v. 0.01 ton per year SO<sub>2</sub>.
- b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 950 per year based upon a rolling, 12-month summation of the operating hours..  
 Authority for Term: (OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1))
- (2) The permittee shall burn only natural gas in this emissions unit.  
 Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information on a monthly basis:
  - a. the total operating hours for this emissions unit; and
  - b. the rolling, 12-month operating hours for this emissions unit.

Authority for Term: (OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05563: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month operating hour's limitation.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05563: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.0076 lb of PE/PM10/MMBtu of actual heat input;

0.0006 lb of SO<sub>2</sub> /MMBtu of actual heat input;

0.04 lb of NO<sub>x</sub>/MMBtu of actual heat input;

0.38 lb of CO/MMBtu of actual heat input; and

0.02 lb of VOC/MMBtu of actual heat input.

Applicable Compliance Method:

The lb/MMBtu emission limitations are based on the emissions unit's potential to emit. The emission limitations are based on the emission factors submitted in PTI Application 14-05563.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitation:

0.46 ton per year NO<sub>x</sub>;

5.0 tons per year CO;

0.32 ton per year OC;

0.10 ton per year PE/PM10; and

0.01 ton per year SO<sub>2</sub>.

Applicable Compliance Method:

The TPY emission limitations were based on the emissions units' hourly potential to emit multiplied by the hours of operation restriction in c)(1). Compliance with the hours of operational restriction, ensures compliance with the TPY emission limitations.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05)

c. Compliance with the annual operating hour's limitation shall be based upon the record keeping in d)(2).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install

14-05563: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

**13. Emissions Unit Group -Indirect-fired air preheaters NG: B026, B027, B028, B029, B043, and B044.**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b> |
|--------------|--|
| B026         | 87.5 MMBtu/hr natural gas, indirect-fired air preheater  |
| B027         | 87.5 MMBtu/hr natural gas, indirect-fired air preheater  |
| B028         | 87.5 MMBtu/hr natural gas, indirect-fired air preheater  |
| B029         | 87.5 MMBtu/hr natural gas, indirect-fired air preheater  |
| B043         | 23.5 MMBtu/hr natural gas, indirect-fired air preheater  |
| B044         | 23.5 MMBtu/hr natural gas, indirect-fired air preheater  |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures   |
|----|---|---|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-05794)    | See b)(2)a.   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05794) | 0.10 lb of NOx/MMBtu of actual heat input*<br>0.08 lb of CO/MMBtu actual heat input*<br>0.011 lb of VOC/MMBtu of actual heat input*<br>0.002 lb of PE/PM10/MMBtu of actual heat input*<br>0.0006 lb of SO2/MMBtu of actual heat input*<br><br>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.<br><br>Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average. |

|    | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
|    |  | The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D), OAC rule 3745-17-10(B)(1) and 40 CFR Part 63 Subpart DDDDD.  |
| c. | OAC rule 3745-17-07(A)   | The emission limitation established by this rule is the same as or less stringent than that established under 3745-31-05(A)(3).   |
| d. | OAC rule 3745-17-10(B)(1)  | The emission limitation established by this rule is the same as or less stringent than that established under 3745-31-05(A)(3).   |
| e. | OAC rule 3745-18-06(A)   | Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned. |
| f. | 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. | See b)(2)a.   |

(2) Additional Terms and Conditions

- a. The maximum total annual emissions from emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:
  - i. 39.9 tons per year NO<sub>x</sub>;
  - ii. 99.9 tons per year CO;
  - iii. 19.8 tons per year OC;
  - iv. 9.76 tons per year PE/PM<sub>10</sub>;and
  - v. 49 tons per year SO<sub>2</sub>.

The annual emission limitations specified in this permit are based on the permittee's projected needs for testing engines in various ranges of operation. The permittee may adjust the number of hours of testing and fuel amounts used as long as the annual emission limitations specified in this permit are not exceeded.

- b. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall maintain monthly records of the following information in order to monitor compliance with the rolling, 12-month summation emission limitations:

- a. the total natural gas usage, in MMscf or pounds, for this emissions unit;
- b. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for this emissions unit\*;
- c. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined; and
- d. the updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

\*The emissions shall be calculated using the natural gas usage recorded in d)(2)a. and the emission factors referenced in f)(1)a.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05794: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month emission limitations specified in b)(2)a.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05794: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.10 lb NO<sub>x</sub>/MMBtu of actual heat input;

0.08 lb CO/MMBtu actual heat input;

0.011 lb VOC/MMBtu of actual heat input;

0.002 lb PE/PM<sub>10</sub>/MMBtu of actual heat input; and

0.0006 lb SO<sub>2</sub>/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum natural gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4,

Table 1.4-2 (revised 7/98) pollutant specific emission factor, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

The maximum total annual emissions from emissions units B026, B027, B028, B029, B043, B044, F019, and F020, combined, shall not exceed the following emission limitations based upon a rolling, 12-month summation:

- i. 39.9 tons per year NO<sub>x</sub>;
- ii. 99.9 tons per year CO;
- iii. 19.8 tons per year OC;
- iv. 9.76 tons per year PE/PM<sub>10</sub>;and
- v. 49 tons per year SO<sub>2</sub>.

Applicable Compliance Method:

Compliance with the emission limitations specified above shall be determined by the record keeping requirements specified in d)(2)d.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

c. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rules 3745-77-07(C)(1) and OAC rules 3745-17-3(B)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05794: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that

compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

- g) Miscellaneous Requirements
  - (1) None.

**14. Emissions Unit Group -Internal combustion engines: B014, B015, B016**

| EU ID | Operations, Property and/or Equipment Description                   |
|-------|---|
| B014  | 4.72 MMBtu/hr Natural Gas Fired 4 SRB SI Waukesha A engine (EA-204) |
| B015  | 4.72 MMBtu/hr Natural Gas Fired 4 SRB SI Waukesha A engine (EA-206) |
| B016  | 4.72 MMBtu/hr Natural Gas Fired 4 SRB SI Waukesha A engine (EA-206) |

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements                                     | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-05168)                          | See b)(2)a. and c)(1).   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05168)                       | 0.0095 lb PE/PM10/MMBtu<br>2.27 lbs NOx/MMBtu<br>3.51 lbs CO/MMBtu<br>0.36 lb VOC/MMBtu<br>0.0006 lb SO2/MMBtu<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 3745-31-05(D). |
| c. | OAC rule 3745-17-07(A)  | Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.   |
| d. | OAC rule 3745-17-11(B)(5)(a)                                      | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |
| e. | OAC rule 3745-18-06(G)  | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).   |
| f. | 40 CFR Part 63 Subpart ZZZZ—<br>Stationary Reciprocating Internal | The concentration of formaldehyde in the stationary RICE exhaust shall not exceed  |

|  | Applicable Rules/Requirements   | Applicable Emissions Limitations/Control Measures   |
|--|---|---|
|  | Combustion Engines (RICE). This emissions unit is an existing 4SRB unit fired by natural gas with a horsepower rating greater than 100 less than 500. | 10.3 ppmvd at 15 percent O <sub>2</sub> .<br><br>Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 40 CFR 63.6620 and Table 4 of 40 CFR Part 63 Subpart ZZZZ.<br><br>The permittee must comply with the applicable emission limitations and operating limitations no later than October 19th, 2013.<br><br>See b)(2)a.-b)(2)d. and c)(2)-c)(4). |

(2) Additional Terms and Conditions

- a. The total combined emissions for emissions units B011, B012, B013, B014, B015 and B016 shall not exceed the following based on a rolling, 12-month summation:
  - i. 15.67 TPY PE/PM10;
  - ii. 93.05 TPY NO<sub>x</sub>;
  - iii. 119.71 TPY CO;
  - iv. 41.15 TPY VOC; and
  - v. 33.39 TPY SO<sub>2</sub>.
- b. The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ—Stationary Reciprocating Internal Combustion Engines (RICE). The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 8 of 40 CFR Part 63 Subpart ZZZZ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63 Subpart ZZZZ and Subpart A.
- c. The permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply at all times.
- d. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require

the permittee 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.

c) Operational Restrictions

- (1) The permittee, for emissions units B011 through B016, shall burn only natural gas and the maximum annual natural gas usage rate associated with those emissions units shall not exceed 260.9 million cubic feet, based upon a rolling, 12-month summation of the natural gas usage rates.

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(A)(1)).

- (2) The permittee shall 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 of 40 CFR Part 63 Subpart ZZZZ apply.

Authority for Term: (OAC rule 3745-77-07(A)(1) and 40 CFR 63.6625(h))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(A)(1))

- (2) The permittee shall maintain monthly records of the following information in order to monitor compliance with the rolling, 12-month summation emission limitations:

- a. the total natural gas usage, in MMscf, for this emissions unit;
- b. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for this emissions unit\*;
- c. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for emissions units B011, B012, B013, B014, B015 and B016, combined; and
- d. the updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units B011, B012, B013, B014, B015 and B016, combined (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).
- e. the updated rolling, 12-month summation for the total combined amount of natural gas burned in B011, B012, B013, B014, B015 and B016.

\*The emissions shall be calculated using the natural gas usage recorded in d)(2)a. and the emission factors referenced in f)(1).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Should the permittee elect to install a CEMS as specified in Table 5 of 40 CFR Part 63 Subpart ZZZZ, the permittee must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs 40 CFR 63.6625(a)(1) through (4).

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6625(a))

- (4) If the permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 40 CFR Part 63 Subpart ZZZZ, the permittee must install, operate, and maintain each CPMS according to the requirements in paragraphs 40 CFR 63.6625(b)(1) through (8).

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6625(b))

- (5) If the permittee has an operating limitation that requires the use of a temperature measurement device, the permittee shall install a temperature measurement device, that meets the requirements in d)(5)(a) through d)(5)(d) below:

- a. locate the temperature sensor and other necessary equipment in a position that provides a representative temperature;
- b. use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a noncryogenic temperature range;
- c. use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range; and
- d. conduct a temperature measurement device calibration check at least every 3 months.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6625(k))

- (6) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05168: d)(1)-d)(5). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month emission limitations specified in b)(2)a. or the natural gas usage limitations specified in c)(1).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) As required in Table 7 of 40 CFR Part 63 subpart ZZZZ, the permittee shall submit a semi-annual report containing the information required in e)(3)a.-e)(3)d. noted below. Following the initial compliance report, each subsequent report shall cover the reporting period from January 1 through June 30 and July 1 through December 31. The Semiannual Compliance Reports must be postmarked or delivered no later than July 31 and January 31.

a. The compliance report must contain the following information:

- i. company name and address;
- ii. statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
- iii. date of report and beginning and ending dates of the reporting period;
- iv. if you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction;
- v. if there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period; and
- vi. if there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

b. Should the permittee be using a CMS to comply with the emission or operating limitations in 40 CFR Part 63 Subpart ZZZZ, the compliance report must contain

the information specified in 40 CFR 63.6650(c)(1) through (4) and the information in 40 CFR 63.6650(d)(1) and (2).

- c. For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations 40 CFR Part 63 Subpart ZZZZ, the permittee shall include information in 40 CFR 63.6650(c)(1) through (4) and 40 CFR 63.6650 (e)(1) through (12).
- d. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6650))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05168: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. The permittee shall use the following equation to calculate the rolling, 12-month emissions for PE/PM-10, NO<sub>x</sub>, SO<sub>2</sub>, CO, and VOC for emissions units B011, B012, B013, B014, B015 and B016, combined using the emission factors specified below:  
$$E = [(AxB1) + (Cx B2)]/2000 \text{ lbs/ton}$$

Where:

E = tons of pollutant for emissions units B011, B012, B013, B014, B015 and B016, combined, based on a rolling, 12-month summation of the monthly emissions.

A = emission factor for LM 1500 turbine (as specified in PTI 14-05168, dated 12/06/2001).

B1 = actual natural gas usage for B011-B013 (turbines), in MM cu. ft/yr, based upon a rolling, 12-month summation.

C = emission factor for Waukesha engine (as specified in PTI 14-05168, dated 12/06/2001).

B2 = actual natural gas usage for B014-B016 (engines), in MM cu. ft/yr, based upon a rolling, 12-month summation.

The permittee may use alternate emission factors or heat content values with prior approval from the appropriate Ohio EPA District Office or local air agency. The permittee shall clearly indicate in the reports required in this permit if alternate emission factors or heat contents are used during any reporting period.

b. Emission Limitations:

15.67 TPY of PE/PM10 as a rolling, 12-month summation; and

0.0095 lb PE/PM10/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 10.39 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 9.5 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

c. Emission Limitations:

93.05 TPY NOx as a rolling, 12-month summation; and

2.27 lbs NOx/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 655.86 lbs/MM cubic feet by the actual gas

usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 2270 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

d. Emission Limitations:

119.71 TPY CO as a rolling, 12-month summation; and  
3.51 lbs CO/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 145.89 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 3510 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

e. Emission Limitations:

41.15 TPY VOC as a rolling, 12-month summation  
0.36 lb VOC/MMBtu

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 4.16 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 358 lbs/MM cubic feet by the actual gas usage in cubic

feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

f. Emission Limitations:

33.39 TPY SO<sub>2</sub> as a rolling, 12-month summation; and

0.0006 lb SO<sub>2</sub>/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 33.25 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 0.588 lb/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

g. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Compliance with the natural gas usage limitations in c)(1) may be demonstrated by the recordkeeping in d)(2).

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(C)(1))

i. Emission Limitation:

The concentration of formaldehyde in the stationary RICE exhaust shall not exceed 10.3 ppmvd at 15 percent O<sub>2</sub>.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The permittee shall conduct the initial performance test or other initial compliance demonstrations in Table 4 of 40 CFR Part 63 Subpart ZZZZ within 180 days after the compliance date that is specified for this emissions unit in 40 CFR 63.6595 (at the time of permit issuance October 19th 2013) and according with the provisions in 40 CFR 63.7(a)(2). The test shall be carried out as specified in 40 CFR 63.6620. The permittee shall demonstrate compliance according to Table 5 of 40 CFR Part 63 Subpart ZZZZ.

As specified in Table 3 of 40 CFR Part 63 Subpart ZZZZ, the permittee shall conduct subsequent performance tests on a semiannual basis. After the permittee has demonstrated compliance for two consecutive tests, the permittee may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the formaldehyde emission limitation, or the permittee deviates from any operating limitations, the permittee must resume semiannual performance tests.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the

submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR Part 63 Subpart ZZZZ Tables 4 and 5)

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05168: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) **Miscellaneous Requirements**

- (1) The permittee is limited to operating no more than three engines at any one time. The permittee is authorized to utilize spare engines as long as they are identical (i.e. same heat content input rating) to the ones listed in the permit application and they comply with permit emission limitations.

**15. Emissions Unit Group -Large-bore diesel generators: P231, P234, P235**

| <b>EU ID</b> | <b>Operations, Property and/or Equipment Description</b>      |
|--------------|---|
| P231         | 1600-kW peak-shaving diesel generator CI >500 HP (large bore) |
| P234         | 1600-kW peak-shaving diesel generator CI >500 HP (large bore) |
| P235         | 1600-kW peak-shaving diesel generator CI >500 HP (large bore) |

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-02834)    | See c)(1).   |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-02834) | 49.1 lbs NOx/hr*<br>0.25 lb PE/MMBtu**<br>8.0 lbs SO2/hr*<br>9.6 lbs CO/hr*<br>1.6 lbs OC/hr*<br><br>*These emission limitations are based on the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations.<br><br>**The lbs PE/MMBtu emission limitation established under 3745-31-05(A)(3) is less stringent than that established under OAC rule 3745-17-11(B)(5)(b).<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). |

|    |   |   |
|----|---|---|
| c. | OAC rule 3745-17-07(A)  | Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.   |
| d. | OAC rule 3745-17-11(B)(5)(b)  | 0.062 lb PE/MMBtu of actual heat input.   |
| e. | OAC rule 3745-18-06(B)  | Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten MM Btu per hour total rated capacity are exempt from OAC rule 3745-18-06(G).  |
| f. | 40 CFR Part 63 Subpart ZZZZ—Stationary Reciprocating Internal Combustion Engines (RICE). This emissions unit is an existing compression ignition (non-emergency/non-blackstart) RICE greater than 500 HP. | <p>The CO concentration in the stationary RICE exhaust shall not exceed 23 ppmvd at 15% O<sub>2</sub>; or</p> <p>Reduce CO emissions by 70 percent or more.</p> <p>The permittee must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.</p> <p>See b)(2)a.-b)(2)d., and c)(2)-c)(4).</p> |

(2) Additional Terms and Conditions

- a. The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ—Stationary Reciprocating Internal Combustion Engines (RICE). The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 8 of 40 CFR Part 63 Subpart ZZZZ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63 Subpart ZZZZ and Subpart A.
- b. The permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply at all times.
- c. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee 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.

- d. If this emissions unit is not equipped with a closed crankcase ventilation system, the permittee must comply with either paragraph b)(2)d.ii. or b)(2)b.d.ii below. The permittee 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 Ohio EPA to approve different maintenance requirements that are as protective as manufacturer requirements.
  - i. install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere; or
  - ii. 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.
- c) Operational Restrictions
  - (1) The total combined hours of operation for P231, P234, and P235 emissions unit shall not exceed 1,584 hours per year based on a rolling, 365 day summation.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(A)(1))
  - (2) The diesel fuel burned in this emissions unit shall meet the requirements in 40 CFR 80.510(b) for non-road diesel fuel.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 40 CFR 63.6604)
  - (3) Should the permittee operate an oxidation catalyst to achieve the emission limitations set forth in this permit. The permittee shall:
    - a. maintain the 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
    - 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.

\*The permittee can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

Authority for Term: (OAC rule 3745-77-07(A)(1) and 40 CFR 63.6600(d))
  - (4) The permittee shall 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 2d of 40 CFR Part 63 Subpart ZZZZ apply.

Authority for Term: (OAC rule 3745-77-07(A)(1) and 40 CFR 63.6625(h))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than a diesel fuel as defined in c)(2), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6604)

- (2) The permittee shall collect and record the following information on a daily basis:
- a. the total combined operating hours for emissions units P231, P234, and P235; and
  - b. the rolling, 365-day summation for the total combined operating hours for P231, P234, and P235.

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Should the permittee elect to install a CEMS as specified in Table 5 of 40 CFR Part 63 Subpart ZZZZ, the permittee must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs 40 CFR 63.6625(a)(1) through (4).

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6625(a))

- (4) If the permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 40 CFR Part 63 Subpart ZZZZ, the permittee must install, operate, and maintain each CPMS according to the requirements in paragraphs 40 CFR 63.6625(b)(1) through (8).

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6625(b))

- (5) If the permittee has an operating limitation that requires the use of a temperature measurement device, the permittee shall install a temperature measurement device, that meets the requirements in d)(5)a. through d)(5)d. below:

- a. locate the temperature sensor and other necessary equipment in a position that provides a representative temperature;
- b. use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a noncryogenic temperature range;
- c. use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range; and
- d. conduct a temperature measurement device calibration check at least every 3 months.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6625(k))

- (6) The permittee shall collect and record the following information:
- a. 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 40 CFR 63.10(b)(2)(xiv);
  - b. records of the occurrence and duration of each malfunction of operation ( i.e., process equipment) or the air pollution control and monitoring equipment;
  - c. records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii);
  - d. records of all required maintenance performed on the air pollution control and monitoring equipment; and
  - e. records of actions taken during periods of malfunction to minimize 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.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6655(a))

- (7) For each CEMS or CPMS, the permittee must keep the records listed in paragraphs d)(7)(a) through d)(7)(c) below:
- a. records described in 40 CFR 63.10(b)(2)(vi) through (xi);
  - b. previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3); and
  - c. requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6655(b))

- (8) The permittee shall collect and record the information required in Table 6 (Section 10 or 11 as appropriate) of 40 CFR Part 63 Subpart ZZZZ.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6655(d))

- (9) Except for monitor malfunctions, associated repairs, and required quality assurance activities, must continuously monitor that the RICE is operating. All valid parameter and/or emissions data collected during the compliance demonstration must be used in data averages and calculations used to report emissions and/or operating levels.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6635(b))

- (10) The permittee must retain the records must in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence,

measurement, maintenance, corrective action, report, or record. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6660))

- (11) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-02834: d)(1)-d)(10). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel fuel as defined in c)(2) was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rules 3745-31-05(A)(3) 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 365-day operating hour's limitation specified in c)(1).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645.

Authority for Term: (OAC rule 3745-77-07(C)(1), 40 CFR 63.6630(c), and 40 CFR 63.6645))

- (4) As required in Table 7 of 40 CFR Part 63 subpart ZZZZ, the permittee shall submit a semi-annual report containing the information required in e)(4)a.-e)(4)d. noted below. Following the initial compliance report, each subsequent report shall cover the reporting period from January 1 through June 30 and July 1 through December 31. The Semiannual Compliance Reports must be postmarked or delivered no later than July 31 and January 31.

a. The Compliance report must contain the following information:

- i. company name and address;
- ii. statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
- iii. date of report and beginning and ending dates of the reporting period;

- iv. if you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction;
  - v. if there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period; and
  - vi. if there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- b. Should the permittee be using a CMS to comply with the emission or operating limitations in 40 CFR Part 63 Subpart ZZZZ, the compliance report must contain the information specified in 40 CFR 63.6650(c)(1) through (4) and the information in 40 CFR 63.6650(d)(1) and (2).
  - c. For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations 40 CFR Part 63 Subpart ZZZZ, the permittee shall include information in 40 CFR 63.6650(c)(1) through (4) and 40 CFR 63.6650 (e)(1) through (12).
  - d. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6650))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-02834: e)(1)-e)(4). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

49.1 lbs NO<sub>x</sub>/hr;

0.25 lb PE/MMBtu;

8.0 lbs SO<sub>2</sub>/hr;

9.6 lbs CO/hr; and

1.6 lbs OC/hr.

Compliance Method

Compliance may be based on the emission factors found in Attachment II of Appendix B contained in PTI application 14-2834 dated October 28, 1992. The emission factors specified in this document were developed from source testing by the manufacturer.

If required, the permittee shall demonstrate compliance with these emission limitations through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05(D))

b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rules 3745-77-07(C)(1) and OAC rules 3745-17-03(B)(1))

c. Emission Limitation:

0.062 lb PE/MMBtu of actual heat input

Applicable Compliance Method:

Compliance may be based on the emission factor of 0.062 lb PE/MMBtu of actual heat input from AP-42, Table 3.4-2 (10/96).

If required, compliance with the lb/MMBtu emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

- d. Compliance with the annual operating hour's limitation in c)(1) shall be based upon the record keeping in d)(2).

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-31-05)

- e. Emission Limitation:

The CO concentration in the stationary RICE exhaust shall not exceed 23 ppmvd at 15% O<sub>2</sub>; or

reduce CO emissions by 70 percent or more.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The permittee shall conduct the initial performance test or other initial compliance demonstrations in Table 4 of 40 CFR Part 63 Subpart ZZZZ within 180 days after the compliance date that is specified for this emissions unit in 40 CFR 63.6595 (at the time of permit issuance May 3rd 2013) and according with the provisions in 40 CFR 63.7(a)(2). The test shall be carried out as specified in 40 CFR 63.6620. During the initial performance test, the permittee must establish each operating limitation in Table 2b of 40 CFR Part 63 Subpart ZZZZ that applies and demonstrate compliance according to Table 5 of 40 CFR Part 63 Subpart ZZZZ.

Should the permittee change the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to your stationary RICE.

As specified in Table 3 of 40 CFR Part 63 Subpart ZZZZ, the permittee shall conduct subsequent performance tests every 8,760 hrs of operation or 3 years, whichever comes first.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

Authority for Term: (OAC rule 3745-77-07(C)(1) and 40 CFR Part 63 Subpart ZZZZ Tables 4 and 5)

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-02834: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.

**16. Emissions Unit Group -Natural gas fired boilers: B001, B010**

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| B001  | 100 MMBtu/hour natural gas-fired boiler           |
| B010  | 100 MMBtu/hour natural gas-fired boiler           |

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
| a. | OAC rule 3745-17-07(A)   | Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.  |
| b. | OAC rule 3745-17-10(B)(1)  | The PE from this emissions unit shall not exceed 0.020 lb per MMBtu of actual heat input.   |
| c. | OAC rule 3745-18-06(A)   | Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of 3745-18-06 and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned. |
| d. | 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. | See b)(2)a.   |

(2) Additional Terms and Conditions

a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its

reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rule 3745-77-07(C)(1))

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rule 3745-77-07(C)(1) and OAC rules 3745-17-03(B)(1))

b. Emission Limitation:

0.020 lb PE/MMBtu of actual heat input.

Applicable compliance method when burning only natural gas:

Compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

Authority for Term: (OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

**17. Emissions Unit Group -Natural gas fired turbines: B011, B012, B013**

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| B011  | LM1500A turbine(EA-201)                           |
| B012  | LM1500B turbine (EA-202)                          |
| B013  | LM1500C turbine (EA-203)                          |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures  |
|----|---|--|
| a. | OAC rule 3745-31-05(D)<br>(PTI 14-05168)    | See b)(2)a and c)(1).  |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05168) | 0.0104 lb PE/PM10/MMBtu*<br>0.656 lb NOx/MMBtu*<br>0.146 lb CO/MMBtu*<br>0.0042 lb VOC/MMBtu*<br>0.033 lb SO2/MMBtu*.<br><br>*These emission limitations are based the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to show compliance with these emission limitations.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 3745-31-05(D). |
| c. | OAC rule 3745-17-07(A)                      | Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.   |

|    |  |   |
|----|--|---|
| d. | OAC rule 3745-17-11(B)(4)  | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| e. | OAC rule 3745-18-06(G)   | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| f. | 40 CFR Part 63 Subpart YYYY — National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. | As defined in 40 CFR 63.6090(a)(1), this emissions unit is identified as an existing affected source under 40 CFR Part 63 Subpart YYYY. As provided for under 40 CFR 63.6090(b)(4), as an existing affected source, it is specifically exempt from the requirements of 40 CFR Part 63 Subpart A and Subpart YYYY. |

(2) Additional Terms and Conditions

- a. The total combined emissions for emissions units B011, B012, B013, B014, B015 and B016 shall not exceed the following based on a rolling, 12-month summation:
  - i. 15.67 TPY PE/PM10;
  - ii. 93.05 TPY NO<sub>x</sub>;
  - iii. 119.71 TPY CO;
  - iv. 41.15 TPY VOC; and
  - v. 33.39 TPY SO<sub>2</sub>.

c) Operational Restrictions

- (1) The permittee, for emissions units B011 through B016, shall burn only natural gas and the maximum annual natural gas usage rate associated with those emissions units shall not exceed 260.9 million cubic feet, based upon a rolling, 12-month summation of the natural gas usage rates.

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(A)(1)).

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(A)(1))

- (2) The permittee shall maintain monthly records of the following information in order to monitor compliance with the rolling, 12-month summation emission limitations:
- a. the total natural gas usage, in MMscf, for this emissions unit;
  - b. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for this emissions unit\*;
  - c. the total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub>, for emissions units B011, B012, B013, B014, B015 and B016, combined; and
  - d. the updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for emissions units B011, B012, B013, B014, B015 and B016, combined (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).
  - e. the updated rolling, 12-month summation for the total combined amount of natural gas burned in B011, B012, B013, B014, B015 and B016.

\*The emissions shall be calculated using the natural gas usage recorded in d)(2)a. and the emission factors referenced in f)(1).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05168: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(C)(1))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month emission limitations specified in b)(2)a or the natural gas usage limitations specified in c)(1).

Authority for Term: (OAC rules 3745-31-05(D) and 3745-77-07(C)(1))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05168: e)(1)-e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this

operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install..

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. The permittee shall use the following equation to calculate the rolling, 12-month emissions for PE/PM-10, NO<sub>x</sub>, SO<sub>2</sub>, CO, and VOC for emissions units B011, B012, B013, B014, B015 and B016, combined using the emission factors specified below:

$$E = [(AxB1) + (CxB2)]/2000 \text{ lbs/ton}$$

Where:

E = tons of pollutant for emissions units B011, B012, B013, B014, B015 and B016, combined, based on a rolling, 12-month summation of the monthly emissions.

A = emission factor for LM 1500 turbine (as specified in PTI 14-05168, dated 12/06/2001).

B1 = actual natural gas usage for B011-B013 (turbines), in MM cu. ft/yr, based upon a rolling, 12-month summation.

C = emission factor for Waukesha engine (as specified in PTI 14-05168, dated 12/06/2001).

B2 = actual natural gas usage for B014-B016 (engines), in MM cu. ft/yr, based upon a rolling, 12-month summation.

The permittee may use alternate emission factors or heat content values with prior approval from the appropriate Ohio EPA District Office or local air agency. The permittee shall clearly indicate in the reports required in this permit if alternate emission factors or heat contents are used during any reporting period.

b. Emission Limitations:

15.67 TPY PE/PM10 as a rolling, 12-month summation; and

0.0104 lb of PE/PM10/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 10.39 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines

determined by multiplying 9.5 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

c. Emission Limitations:

93.05 TPY NO<sub>x</sub> as a rolling, 12-month summation; and

0.656 lbs NO<sub>x</sub>/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 655.86 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 2270 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

d. Emission Limitations:

119.71 TPY CO as a rolling, 12-month summation; and

0.156 lbs CO/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 145.89 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 3510 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

e. Emission Limitations:

41.15 TPY VOC as a rolling, 12-month summation

0.0042 lb VOC/MMBtu

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 4.16 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 358 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

f. Emission Limitations:

33.39 TPY SO<sub>2</sub> as a rolling, 12-month summation; and

0.033 lb SO<sub>2</sub>/MMBtu.

Applicable Compliance Methods:

Compliance with the TPY emission limitation shall be demonstrated by multiplying the emission factor of 33.25 lbs/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation) of the LM 1500 turbines then adding that to the emissions from the Waukesha engines determined by multiplying 0.588 lb/MM cubic feet by the actual gas usage in cubic feet per year (based on a rolling, 12-month summation). The total pounds of emissions are converted to tons by dividing by 2000.

Compliance with the lb/MMBtu emission limitation is determined by dividing the appropriate emission factor above by 1000 Btu/cubic foot (heat content of natural gas).

If required, the permittee shall demonstrate compliance with lb/MMBtu emission limitation through emission testing performed in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

g. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Compliance with the natural gas usage limitations in c)(1) may be demonstrated by the recordkeeping in d)(2).

Authority for Term: (OAC rules 3745-31-05 and 3745-77-07(C)(1))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05168: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.

**18. Emissions Unit Group -Natural gas/No.6 Oil fired boiler: B008, B009**

| EU ID | Operations, Property and/or Equipment Description     |
|-------|---|
| B008  | 142 MMBtu/hour natural gas and No. 6 oil-fired boiler |
| B009  | 142 MMBtu/hour natural gas and No. 6 oil-fired boiler |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures   |
|----|--|---|
| a. | OAC rule 3745-17-07(A)   | Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.  |
| b. | OAC rule 3745-17-10(C)(1)  | 0.13 lb PE/MMBtu of actual heat input when burning No.6 fuel oil.   |
| c. | OAC rule 3745-17-10(B)(1)  | When burning only natural gas, the PE from this emissions unit shall not exceed 0.020 lb per MMBtu of actual heat input.  |
| d. | OAC rule 3745-18-37(W)   | 1.52 lbs sulfur dioxide (SO <sub>2</sub> )/MMBtu of actual heat input.<br><br>The combined average operating rate for emissions units B008 and B009 shall not exceed 244 MMBtu/hr for any calendar day. |
| e. | OAC rule 3745-18-06(A)   | The lbs SO <sub>2</sub> /MMBtu emission limitation above shall not apply to this emissions unit when burning only natural gas as defined in OAC rule 3745-18-01.  |
| f. | 40 CFR Part 63, Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. | See b)(2)a.   |

(2) Additional Terms and Conditions

- a. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

- (1) The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-18-37(W))

d) Monitoring and/or Recordkeeping Requirements

- (1) When burning No.6 fuel oil, the permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-17-07(A)(1),

- (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745 18 04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745 18 04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

Authority for Term: (OAC rules 3745-77-07(C)(1), 3745-18-04(E)(3), and 3745-18-04(I))

- (3) The permittee shall monitor and record the actual heat input, in MMBtu per hour, for B008 and B009, combined.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-18-37(W))

e) Reporting Requirements

- (1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from d)(2) above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation occurs.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-18-37)

- (2) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

Authority for term: (OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the combined average operating rate of 244 MMBtu/hr for emissions units B008 and B009.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-18-37(W))

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.52 lbs/MMBtu.

Applicable Compliance Method:

Continuous compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received, or each daily composite sample of the oil burned during each calendar day, meets the limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

Authority for Term: (OAC rules 3745-77-07(C)(1) and 3745-18-04(E))

b. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Authority for term: (OAC rule 3745-77-07(C)(1) and OAC rules 3745-17-03(B)(1))

c. Emission Limitation:

0.13 lb PE/MMBtu of actual heat input when burning No.6 fuel oil.

Applicable compliance method when burning number six fuel oil:

For the use of number six fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 10 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while firing number six fuel oil.

d. Emission Limitation:

0.020 lb PE/MMBtu of actual heat input when burning only natural gas.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while firing only natural gas.

- e. Compliance with the combined average operating rate of 244 MMBtu/hr for emissions units B008 and B009 shall be demonstrated by the record keeping in d)(3).

g) Miscellaneous Requirements

- (1) None.

**19. Emissions Unit Group -Robotic coating systems: K030, K032, K033, K034**

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| K030  | Robotic Coating System 1                          |
| K032  | Robotic Coating System 3                          |
| K033  | Robotic Coating System 4                          |
| K034  | Robotic Coating System 5                          |

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) d)(3) through d)(6).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

|    | Applicable Rules/Requirements               | Applicable Emissions Limitations/Control Measures   |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 14-05618) | OC emissions shall not exceed 2.5 TPY, including cleanup materials.<br>See b)(2)a., c)(1), and c)(2).<br>PE/PM10 shall not exceed 0.01 pound per hour and 0.03 ton per year.*<br><br>*The PE/PM10 emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.<br><br>The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G)(2). |
| b. | OAC rule 3745-21-07(G)(2)                   | OC emissions shall not exceed 8 pounds per hour and 40 pounds per day, including cleanup materials. See b)(2)b.   |
| c. | OAC rule 3745-21-09(U)                      | Exempt, per OAC rule 3745-21-09(U)(2)(b).   |

|    |                           |   |
|----|---------------------------|---|
| d. | OAC rule 3745-17-07(A)    | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  |
| e. | OAC rule 3745-17-11(C)(3) | Any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology shall comply with such limitations and measures instead of paragraphs 3745-17-11(c)(1) and (c)(2). |
| f. | 40 CFR 63 Subpart GG      | Exempt per 40 CFR 63.741(f) since the emissions unit employs specialty coatings as outlined in this rule.   |

(2) Additional Terms and Conditions

- a. Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.
- b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)b., d)(1)e., d)(1)f., and e)(1).

c) Operational Restrictions

- (1) The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (2) The OC content as applied, of each cleanup material employed shall not exceed 8.2 pounds of OC per gallon of cleanup material.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for each emissions unit:

- a. The company identification for each coating and cleanup material employed.
- b. The number of gallons of each coating and cleanup material employed.
- c. The organic compound content of each coating and cleanup material, in pounds per gallon.
- d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.
- e. The total number of hours the emissions unit was in operation.
- f. The average hourly organic compound emission rate for all coatings and cleanup materials, [i.e., the result of d)(1)d. divided by d)(1)e.], in pounds per hour (average).
- g. Documentation indicating whether each coating employed meets the definition of an "exempt specialty coating" per 40 CFR Part 63, Subpart GG.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

Authority for Term: (OAC rules 3745-77-07(C)(1), 3745-21-07(G), and 3745-31-05(A)(3))

- (2) The permittee shall maintain monthly records of the OC emissions from the coatings and cleanup materials for each emissions unit. The OC emissions shall be summarized in tons per year at the end of each calendar year.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (3) The permit to install for emissions units K030, K032, K033, and K034, combined, was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's Review of New Sources of Air Toxic Emissions policy (Air Toxic Policy) was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene

TLV (ug/m<sup>3</sup>): 188,000

Maximum Hourly Emission Rate (lbs/hr): 40

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 4214

MAGLC (ug/m<sup>3</sup>): 4476

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (4) Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the Air Toxics Policy is satisfied. Consequently, prior to making a change that could impact such parameters; the permittee shall conduct an evaluation to determine that the Air Toxic Policy will still be satisfied. If, upon evaluation, the permittee determines that the Air Toxic Policy will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the Air Toxic Policy include the following:
- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (5) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (6) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:
- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and
  - c. When the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (7) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05618: d)(1)-d)(6). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports which include the following information for this emissions unit:
- a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
  - b. An identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

Authority for Term: (OAC rules 3745-77-07(A)(1), 3745-21-07(G), and 3745-31-05(A)(3))

- (2) The permittee shall submit deviation reports which identify all exceedances of the OC content limits in c)(1) and c)(2).

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (3) The permittee shall submit annual reports which specify the total organic compound emissions from each emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emission data for each emissions unit in the annual Fee Emission Report.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05618: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

OC emissions shall not exceed 8 pounds per hour and 40 pounds per day, including cleanup materials.

OC emissions shall not exceed 2.5 tons per year (TPY), including cleanup materials.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in d)(1) and d)(2).

b. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitation:

Particulate emissions (PE) and particulate matter emissions 10 microns or less in diameter ( $PM_{10}$ ) shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance with the hourly PE/ $PM_{10}$  emission limitation shall be determined by the following equation:

$$E = \text{maximum coating solids usage rate (in pounds per hour)} \times (1-TE) \times (1-CE)$$

where:

E = PE/ $PM_{10}$  emission rate (in pounds per hour)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the water-wash curtain or dry particulate filter.

If required, the permittee shall demonstrate compliance with the hourly allowable PE/ $PM_{10}$  limitation in accordance with Methods 1 through 5 in Appendix A of 40 CFR, Part 60.

d. Emissions Limitation:

Particulate emissions (PE) and particulate matter emissions 10 microns or less in diameter ( $PM_{10}$ ) shall not exceed 0.03 ton per year (TPY).

Applicable Compliance Method:

The annual emissions limitation is based upon the maximum annual operating rate of 5400 hours per year as provided by the permittee in the PTI application 14-05618, as received on September 13, 2004. Compliance shall be determined by multiplying 0.01 pound PE/PM<sub>10</sub> per hour by a summation of the daily operating hours, as recorded in d)(1)e., and then dividing by 2000 pounds per ton.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (2) Compliance with the OC content limitations in c) shall be demonstrated by the record keeping requirements specified in d)(1).

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (3) Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

Authority for Term: (OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05618: f)(1)-f)(3). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.