PART 70
PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2013-063
Expiration Date: OCT 14 2018
Installation ID: 097-0138
Project Number: 2005-10-037

Installation Name and Address
EBV Explosives Environmental Company dba
General Dynamics Ordnance and Tactical Systems Munitions Services
4174 County Road 180
Carthage, MO 64836
Jasper County

Parent Company's Name and Address
General Dynamics Ordnance and Tactical Systems
11399 - 16th Court North, Suite 200
St. Petersburg, FL 33716

Installation Description:
General Dynamics Ordnance and Tactical Systems Munition Services (GD-OTS MS) is a reactive waste management facility located in Jasper County. GD-OTS MS operates two incinerators and ten thermal treatment units for the purpose of treating of reactive wastes. Supporting the operation of these units are Storage Magazines, a Storage/Feed Handling Building, a Feed/Control Building, a diesel powered emergency electric generator and residual/ash handling systems.

OCT 15 2013

Effective Date
Director or Designee
Department of Natural Resources
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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION
General Dynamics Ordnance and Tactical Systems Munition Services (GD-OTS MS) is a reactive waste management facility located in Jasper County. The facility has two incinerators; the rotary kiln and the car bottom furnace. The rotary kiln is fed a wide variety of solid explosive waste materials via a continuous feed system while the car bottom furnace (CBF) is loaded batch-wise. The rotary kiln or CBF can be operated alone or at the same time and both are fired with natural gas. The secondary combustor provides the second stage in the final combustion of the exhaust gases from either the kiln or the CBF, depending on which primary combustion unit is operating. In addition to the pollution control function that the secondary combustor provides, this plant utilizes a two-stage air pollution control system (APCS). The first stage of this system is the spray dryer where the exhaust gases from the secondary combustor immediately enter the spray dryer where they are quenched with a dilute soda ash/water solution. The temperature of the exhaust gas from the spray dryer is maintained by controlling the flow of quench water fed to the spray dryer. Concurrent with vaporization of the water, the soda ash reacts with sulfur oxides and/or hydrochloric acid, if present, to form sodium salts. These reaction products, together with the unreacted soda ash, become entrained in the gas within the spray dryer as solid particulate matter. The second stage of the APCS is the three-section baghouse. The pollution control system is designed to operate with just two of the baghouse sections on-line.

The facility also utilizes 10 thermal treatment units for reactive wastes. Building #1 has four static kiln for the thermal treatment of fuzes with a dedicated APCS consisting of a cartridge filter and a HEPA filter. Building #1 also was four contained thermal treatment units for treatment of submunitions with two APCSs that handle two thermal treatment units each. These APCSs consisting of a cartridge filter and a HEPA filter. Building #3 has two propellant thermal treatment units with a dedicated APCS consisting of a dry scrubber, six baghouses and, a wet scrubber.

Supporting the operation of these units are Storage Magazines, a Storage/Feed Handling Building, a Feed/Control Building, a diesel powered emergency electric generators, a diesel powered emergency fire water pump and residual/ash handling systems.

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter ≤ Ten Microns (PM₁₀)</td>
<td>0.54</td>
<td>1.24</td>
<td>0.23</td>
<td>0.34</td>
<td>0.26</td>
</tr>
<tr>
<td>Particulate Matter ≤ 2.5 Microns (PM₂.₅)</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Sulfur Oxides (SO₂)</td>
<td>0.23</td>
<td>0.23</td>
<td>0.35</td>
<td>0.29</td>
<td>0.23</td>
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<tr>
<td>Nitrogen Oxides (NOₓ)</td>
<td>24.54</td>
<td>25.22</td>
<td>32.39</td>
<td>19.75</td>
<td>23.93</td>
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<td>Volatile Organic Compounds(VOC)</td>
<td>0.24</td>
<td>0.23</td>
<td>0.40</td>
<td>0.34</td>
<td>0.26</td>
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<td>Carbon Monoxide (CO)</td>
<td>9.45</td>
<td>8.12</td>
<td>0.42</td>
<td>0.35</td>
<td>0.28</td>
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<tr>
<td>Lead (Pb)</td>
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<tr>
<td>Hazardous Air Pollutants (HAPs)</td>
<td>83.06</td>
<td>315.72</td>
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<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Ammonia (NH₃)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
EMISSION UNITS WITH LIMITATIONS
The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

2011 EIQ
Reference No.   Description of Emission Unit
EP01       Storage Feed Handling Building Vent #1
EP02       Storage Feed Handling Building Vent #2
EP03       Incinerator Stack (includes Rotary Kiln Incinerator, Car Bottom Furnace, and Secondary Combustor)
EP04       Emergency Diesel Generator
EP05       Propellant Thermal Treatment Units 1 and 2 (Building #3)
EP06       4 Static Kilns (Building #1)
EP07       Thermal Treatment Units 1 & 2 (Building #1)
EP08       Thermal Treatment Units 3 & 4 (Building #1)

EMISSION UNITS WITHOUT LIMITATIONS
The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Unit ID#   Description of Emission Source
HVAC 01  1 MMBtu/hour, Natural gas, Storage Feed Handling Building
HVAC 02  1 MMBtu/hour, Natural gas, Kiln Feed Room and Control Room
HVAC 03  0.2 MMBtu/hour, Natural gas, Field Office
HVAC 04  0.4 MMBtu/hour, Natural gas, Building #2
HVAC 05  0.4 MMBtu/hour, Natural gas, Building #3
HVAC 06  0.4 MMBtu/hour, Natural gas, Building #4

DOCUMENTS INCORPORATED BY REFERENCE
These documents have been incorporated by reference into this permit.
1.) Construction Permit 0990-002B
2.) Construction Permit Number: 1293-010
3.) Construction Permit Number: 0894-007
4.) Construction Permit Number: 012012-001A
II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

None.
III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<table>
<thead>
<tr>
<th>EIQ Reference #</th>
<th>Emission Unit Description</th>
<th>Control Device(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP01</td>
<td>Storage Feed Handling Building Vent #1</td>
<td>HEPA Particulate Filter, Activated Carbon Filter</td>
</tr>
<tr>
<td>EP02</td>
<td>Storage Feed Handling Building Vent #2</td>
<td>HEPA Particulate Filter, Activated Carbon Filter</td>
</tr>
</tbody>
</table>

**Emission Limitation:**

1.) The permittee shall operate the activated carbon system to control volatile organic compounds (VOCs) at all times when materials are being handled which may contain VOCs.  
   [Special Condition 1]

2.) The permittee shall operate the HEPA filter system to reduce particulate matter less than ten (10) microns (PM\(_{10}\)) emissions at all times that powdered material is being handled or when other materials are being handled in such a way as to create airborne particulate.  
   [Special Condition 2]

3.) The permittee shall not process more material in the feed/handling building than is actually treated in the incinerator on a calendar year basis.  
   [Special Condition 3]

**Monitoring/Recordkeeping:**

1.) The permittee shall maintain operating and maintenance logs for the activated carbon and HEPA filter systems which include the following:
   a.) Incidents of malfunction, with impact on emissions, time, date and duration of event, probable cause, and corrective actions; and
   b.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

2.) These records shall be made available immediately for inspection to the Department of Natural Resources’ personnel upon request.

3.) All records shall be maintained for five years.

**Reporting:**

The permittee shall report any deviations of this permit condition to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).
**Permit Condition 2**

10 CSR 10-6.080 *National Emission Standards for Hazardous Air Pollutants*

40 CFR Part 61 Subpart C - *National Emission Standard for Beryllium*

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Emission Unit Description</th>
<th>Vents to Control Device System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP03 - Incinerator Stack</td>
<td>Rotary Kiln Incinerator (4 MMBtu)</td>
<td>1) Secondary Combustor (12 MMBtu NG)</td>
</tr>
<tr>
<td></td>
<td>Car Bottom Furnace (3.6 MMBtu)</td>
<td>2) Spray Dryer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) 3- Section Baghouse (ME-105A, B, C)</td>
</tr>
</tbody>
</table>

**Emission Limitation:**

Emissions to the atmosphere from stationary sources shall not exceed ten (10) grams of beryllium over a twenty-four (24) hour period, except as provided in §61.32(b). [§61.32(a)]

**Monitoring:**

The permittee shall ensure that no changes in the operation be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Director. [§61.33(c)]

**Performance Testing Requirements:**

1.) Stack testing shall be conducted as follows:
   a.) *Frequency.* In conjunction with the next scheduled comprehensive performance test (CPT) that is required under 40 CFR 63 Subpart EEE (See Permit Condition 4).
   b.) *Methods.* 40 CFR 61, Appendix B, Method 103 or 104 or other EPA approved method. [§61.33(a)]
   c.) *Test Condition.* Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. [§61.33(c)]
   d.) *Calculations.* The permittee shall calculate the pollutant emission rate in g/day in accordance with the selected method. Where emissions depend upon the relative frequency of operation of different types of processes, operating hours, operating capacities, or other factors, the calculation of maximum twenty-four (24) hour-period emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions. [§61.33(c)]

**Recordkeeping:**

Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Director, for a minimum of five (5) years. [modified §61.33(e)]

**Reporting:**

1.) The Director shall be notified at least thirty (30) days prior to an emission test so that he may at his option observe the test. [§61.33(b)]
2.) No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Director. [§61.33(c)]
3.) All determinations on beryllium emissions from source tests shall be reported to the Director by a registered letter dispatched before the close of the next business day following such determination. [§61.33(d)]

### Permit Condition 3

10 CSR 10-6.060 *Construction Permits Required*  
Construction Permit 0990-002B

<table>
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<tr>
<th>EIQ Reference</th>
<th>Emission Unit Description</th>
<th>Vents to Control Device System:</th>
</tr>
</thead>
</table>
| EP03 - Incinerator Stack | Rotary Kiln Incinerator (4 MMBtu)  
Car Bottom Furnace (3.6 MMBtu) | 1) Secondary Combustor (12 MMBtu NG)  
2) Spray Dryer (ME-104)  
3) 3- Section Baghouse (ME-105A, B, C) |

**Emission Limitation:**

1.) The emission rate of each pollutant emitted by this emission unit shall never exceed the annual de minimis level listed in 10 CSR 10-6.020(3)A. [Special Condition 12]

2.) The permittee shall install continuous monitoring systems for measuring the opacity of exhaust gases and the temperature of the secondary combustor. The temperature measurement shall be made at a point one (1) second downstream from the entrance to the secondary combustor. [Special Condition 3]

3.) The secondary combustor must be at least eighteen hundred degrees Fahrenheit (1800°F) before combustion of waste in the kiln or bottom car furnace can occur. A mechanical (not manual) system of combustion (primary and secondary combustion burners) operation must be installed to ensure this [Special Condition 5]

4.) This incineration unit shall be operated in accordance with the manufacturer’s instructions and guidelines of operation, to include preheating all chambers to the proper operating temperatures and proper use of all burners to maintain proper operating temperatures. [Special Condition 10]

**Monitoring:**

1.) The opacity of the exhaust gases and the temperature of the secondary combustor shall be recorded continuously whenever the unit is operating. The method of recording will be subject to Air Pollution Control Program review and approval. [Special Condition 4]

**Recordkeeping:**

1.) The opacity continuous monitor recordings shall be kept for review by Air Pollution Control Program personnel for a five year period. [Special Condition 4]

2.) Records shall be kept on-site, for the previous sixty (60) month period, indicating the amount of waste (in tons) processed monthly at this facility. These records shall be made available to employees of the Missouri Department of Natural Resources upon their request. [Special Condition 6]

3.) Records shall be kept on-site, for the previous sixty (60) month period, indicating the amount of natural gas (in standard cubic feet) used monthly at this facility. These records shall be made available to employees of the Missouri Department of Natural Resources upon their request. [Special Condition 7]

4.) The manufacturer’s instructions and guidelines of operation shall be available at all times at the site upon request. [Special Condition 11]

5.) The permittee shall keep monthly records including at least the following information:
a.) The total amount of each type of waste incinerated with both that month’s and the rolling twelve (12) month total shown.
b.) The weight percentage of each component of each waste type.
c.) Total hours of operation of rotary kiln with both that month’s and the rolling twelve (12) month total shown.
d.) Total hours of operation of car bottom furnace with both that month’s and the rolling twelve (12) month total shown.
e.) Calculations showing the emission rate of each pollutant listed in 10 CSR 10-6.020(3)A with both that month’s total and the rolling twelve (12) month total shown. [Special Condition 13]

6.) A copy of each monthly record shall be kept on-site until thirty (30) days following the end of the rolling twelve (12) month period. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon verbal request. [Special Condition 14]

**Reporting:**
The permittee shall report any deviations of this permit condition to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

### Permit Condition 4

**10 CSR 10-6.075 Maximum Achievable Control Technology Standards**


<table>
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<tr>
<th>EIQ Reference</th>
<th>Emission Unit Description</th>
<th>Vents to Control Device System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP03 - Incinerator Stack</td>
<td>Rotary Kiln Incinerator (4 MMBtu) Car Bottom Furnace (3.6 MMBtu)</td>
<td>1) Secondary Combustor (12 MMBtu NG) 2) Spray Dryer 3) 3- Section Baghouse (ME-105A, B, C)</td>
</tr>
</tbody>
</table>

**Emission Limitations:**
The permittee shall meet all applicable emissions limitations and operating requirements in §63.1219 including the following:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Pollutant/Criteria</th>
<th>Emission Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 CFR 63.1219(a)(1)(i)(A)</td>
<td>PCDDs/PCDFs (TEQ basis)</td>
<td>≤ 0.20 ng/dscm</td>
</tr>
<tr>
<td>40 CFR 63.1219(a)(2)</td>
<td>Mercury</td>
<td>≤ 130 μg/dscm</td>
</tr>
<tr>
<td>40 CFR 63.1219(a)(3)</td>
<td>Semi-volatile Metals (SVM) (Cadmium and Lead)</td>
<td>≤ 230 μg/dscm</td>
</tr>
<tr>
<td>40 CFR 63.1219(a)(4)</td>
<td>Low Volatile Metals (LVM) (Arsenic, Beryllium and Chromium)</td>
<td>≤ 92 μg/dscm</td>
</tr>
<tr>
<td>40 CFR 63.1219(a)(5)(ii)</td>
<td>Total Hydrocarbons</td>
<td>≤ 10 ppmv</td>
</tr>
<tr>
<td>40 CFR 63.1219(a)(6)</td>
<td>Hydrogen Chloride &amp; Chlorine</td>
<td>≤ 32 ppmv dry as Cl-</td>
</tr>
<tr>
<td>40 CFR 63.1219(a)(7)</td>
<td>Particulate Matter (PM)</td>
<td>≤ 0.013 gr/dscf</td>
</tr>
<tr>
<td>40 CFR 63.1219(c)</td>
<td>Principal Organic Hazardous Constituent (POHC)</td>
<td>DRE ≥ 99.99%</td>
</tr>
</tbody>
</table>

**Notes:**
All emission concentrations are corrected to 7% oxygen.
DRE - Destruction and Removal Efficiency standard as defined in §63.1219(c)
POHC – Organic compounds in the feedstream that are the most difficult to destroy.
TEQ - The international method of expressing toxicity equivalents for dioxins and furans
Emission Standards:
1.) The permittee shall comply with the emission standards at all times as set forth in 40 CFR 63, subpart EEE except:
   a.) During periods of startup, shutdown, and malfunction; and
   b.) When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cut off for a period of time not less than the hazardous waste residence time) and permittee has documented in the operating record that they are complying with all otherwise applicable requirements and standards promulgated under authority of Sections 112 or 129 of the Clean Air Act in lieu of the emission standards under §63.1219; the monitoring and compliance standards of this section and §§ 63.1207 through 63.1209, except the modes of operation requirements of § 63.1209(q); and the notification, reporting, and recordkeeping requirements of §§63.1210 through 63.1212.  [§63.1206(b)(1)(i) and (ii)]

Operating Requirements:
1.) The permittee shall operate only under the operating requirements specified in the Documentation of Compliance under §63.1211(e) or the Notification of Compliance under §§63.1207(j) and 63.1210(d), except:
   a.) During performance tests under approved test plans according to §63.1207(e), (f), and (g), and
   b.) Under the conditions of §63.1206(b)(1)(i) or (ii) [§63.1206(c)(1)(i)]
2.) The Documentation of Compliance and the Notification of Compliance shall contain operating requirements including, but not limited to, the operating requirements in this §63.1206 and §63.1209.  [§63.1206(c)(1)(ii)]
3.) Failure to comply with the operating requirements is failure to ensure compliance with the emission standards of 40 CFR Part 63, subpart EEE.  [§63.1206(c)(1)(iii)]
4.) Operating requirements in the Notification of Compliance are applicable requirements for purposes of parts 40 CFR Parts 70 and 71.  [§63.1206(c)(1)(iv)]
5.) The permittee shall incorporate the operating requirements specified in the Notification of Compliance into their title V permit.  [§63.1206(c)(1)(v)]

Startup, Shutdown, and Malfunction Plan:
1.) The permittee is subject to the startup, shutdown, and malfunction plan requirements of § 63.6(e)(3).  [§63.1206(c)(2)(i)]
2.) If the permittee elects to comply with §§ 270.235(a)(1)(iii), 270.235(a)(2)(iii), or 270.235(b)(1)(ii) of 40 CFR to address RCRA concerns to minimize emissions of toxic compounds from startup, shutdown, and malfunction events (including releases from emergency safety vents) then:
   a.) The startup, shutdown, and malfunction plan shall include a description of potential causes of malfunctions, including releases from emergency safety vents that may result in significant releases of hazardous air pollutants and actions the permittee is taking to minimize the frequency and severity of those malfunctions.  [§63.1206(c)(2)(ii)]
   b.) The permittee shall submit the startup, shutdown, and malfunction plan to the Director for review and approval. Approval procedures are found in §63.1206(c)(2)(ii)(B).  [§63.1206(c)(2)(ii)]
   i.) The permittee shall request approval in writing from the Director within five days after making a change to the startup, shutdown, and malfunction plan that may significantly increase emissions of hazardous air pollutants. The approval of such changes to the startup, shutdown, and malfunction plan, shall follow the procedures provided by paragraph §63.1206(c)(2)(ii)(B) for initial approval of the plan.
3.) The permittee shall identify in the plan, a projected oxygen correction factor based on normal operations to use during periods of startup and shutdown. [§63.1206(c)(2)(iii)]

4.) The permittee shall record the plan in the operating record. [§63.1206(c)(2)(iv)]

**Operating under the startup, shutdown, and malfunction plan**

1.) The permittee shall operate these emission units under the startup, shutdown, and malfunction plan as described in §63.1206(c)(2)(v) such that:

   a.) During malfunctions, the automatic waste feed cutoff requirements of §63.1206(c)(3) continue to apply, except for paragraphs §63.1206(c)(3)(v) and §63.1206(c)(3)(vi). If permittee exceeds a 40 CFR Part 63, subpart EEE emission standard monitored by a CEMS or COMs or operating limit specified under §63.1209, the automatic waste feed cutoff system shall immediately and automatically cutoff the hazardous waste feed, except as provided by §63.1206(c)(3)(viii). If the malfunction itself prevents immediate and automatic cutoff of the hazardous waste feed, however, permittee shall cease feeding hazardous waste as quickly as possible.

   b.) Although the automatic waste feed cutoff requirements continue to apply during a malfunction, an exceedance of an emission standard monitored by a CEMS or COMs or operating limit specified under §63.1209 is not a violation of this subpart if the permittee takes the corrective measures prescribed in the startup, shutdown, and malfunction plan.

   c.) Excessive exceedances during malfunctions. For each set of ten exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, permittee shall:

      i.) Within 45 days of the 10th exceedance, complete an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation to minimize the frequency, duration, and severity of each exceedance; and

      ii.) Record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the startup, shutdown, and malfunction plan, in the excess emissions report required under §63.10(e)(3). [§63.1206(c)(v)]

   d.) The permittee shall include waste feed restrictions (e.g., type and quantity), and other appropriate operating conditions and limits in the startup, shutdown, and malfunction plan if hazardous waste is being feed during startup or shutdown.

      i.) Permittee shall interlock the operating limits established under paragraph §63.1206(c)(2)(v)(B)(1) with the automatic waste feed cutoff system required under §63.1206(c)(3), except for paragraphs §63.1206(c)(3)(v) and §63.1206(c)(3)(vi).

      ii.) When feeding hazardous waste during startup or shutdown, the automatic waste feed cutoff system shall immediately and automatically cutoff the hazardous waste feed if the operating limits established under paragraph §63.1206(c)(2)(v)(B)(1), except as provided by §63.1206(c)(3)(viii) are exceeded.

      iii.) Although the automatic waste feed cutoff requirements of this paragraph apply during startup and shutdown, an exceedance of an emission standard or operating limit is not a violation of this subpart if permittee complies with the operating procedures prescribed in the startup, shutdown, and malfunction plan.
**Automatic Waste Feed Cutoff:**

1.) Upon the compliance date, the permittee shall operate the hazardous waste combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by §63.1206(c)(3)(viii), when:

   a.) Any of the following are exceeded:
      i.) Operating parameter limits specified under §63.1209 (see Attachment B);
      ii.) An emission standard monitored by a CEMS; and
      iii.) The allowable combustion chamber pressure;

   b.) The span value of any CMS detector, except a CEMS, is met or exceeded;

   c.) Upon malfunction of a CMS monitoring an operating parameter limit specified under §63.1209 or an emission level; or

   d.) Any component of the automatic waste feed cutoff system fails.

2.) During an automatic waste feed cutoff (AWFCO), permittee shall continue to duct combustion gasses to the air pollution control system while hazardous waste remains in the combustion chamber (i.e., if the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated).

3.) The permittee shall continue to monitor, during the cutoff, the operating parameters for which limits are established under §63.1209 and the emissions required under that section to be monitored by a CEMS, and permittee shall not restart the hazardous waste feed until the operating parameters and emission levels are within the specified limits.

4.) If the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of a parameter required to be interlocked with the AWFCO system under §63.1206(c)(3)(i), permittee shall have failed to comply with the AWFCO requirements of §63.1206(c)(3). If an equipment or other failure prevents immediate and automatic cutoff of the hazardous waste feed, however, permittee shall cease feeding hazardous waste as quickly as possible.

5.) If, after any AWFCO, there is an exceedance of an emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber (i.e., whether the hazardous waste residence time has transpired since the hazardous waste feed cutoff system was activated), permittee shall investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs, and record the findings and corrective measures in the operating record.

6.) For each set of ten exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, permittee shall submit to the Director a written report within five calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken. On a case-by-case basis, the Director may require excessive exceedance reporting when fewer than ten exceedances occur during a 60-day block period.

7.) The permittee shall test AWFCO system and associated alarms at least weekly to verify operability, unless the permittee can document in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, permittee shall conduct operability testing at least monthly. Permittee shall document and record AWFCO operability test procedures and results in the operating record.

8.) The permittee may ramp down the waste feed rate of pumpable hazardous waste over a period not to exceed one minute, except as provided by §63.1206(c)(3)(viii)(B). If permittee elects to ramp down the waste feed, permittee shall document ramp down procedures in the operating and maintenance
plan. The procedures shall specify that the ramp down begins immediately upon initiation of automatic waste feed cutoff and the procedures shall prescribe a bona fide ramping down. If an emission standard or operating limit is exceeded during the ramp down, permittee is deemed to have failed to comply with the emission standards or operating requirements of 40 CFR 63, subpart EEE. If the automatic waste feed cutoff is triggered by an exceedance of any of the following operating limits, you may not ramp down the waste feed cutoff: Minimum combustion chamber temperature, maximum hazardous waste feed rate, or any hazardous waste firing system operating limits that may be established for this combustor. [§63.1206(c)(3)(i)-(viii)]

**EVS Openings:**

1.) If an emergency safety vent (ESV) opens when hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent comprehensive performance test (e.g., if the combustion gas by-passes any emission control device that was operating during the performance test), permittee shall document in the operating record whether they remain in compliance with the emission standards of this 40 CFR Part 63, Subpart EEE, considering emissions during the ESV opening event.

2.) The permittee shall develop an ESV operating plan, comply with the operating plan, and keep the plan in the operating record. The ESV operating plan shall provide detailed procedures for rapidly stopping the waste feed, shutting down the combustor, and maintaining temperature and negative pressure in the combustion chamber during the hazardous waste residence time, if feasible. The plan shall include calculations and information and data documenting the effectiveness of the plan's procedures for ensuring that combustion chamber temperature and negative pressure are maintained as is reasonably feasible.

3.) After any ESV opening that results in a failure to meet the emission standards as defined in §63.1206(c)(4)(i), permittee shall investigate the cause of the ESV opening, take appropriate corrective measures to minimize such future ESV openings, and record the findings and corrective measures in the operating record.

4.) The permittee shall submit to the Director a written report within 5 days of an ESV opening that results in failure to meet the emission standards of 40 CFR Part 63, subpart EEE (as determined in §63.1206(c)(4)(i)) documenting the result of the investigation and corrective measures taken. [§63.1206(c)(4)(i)-(iv)]

**Combustion System Leaks:**

1.) The permittee shall control combustion system leaks of hazardous air pollutants must be by:
   a.) Keeping the combustion zone sealed to prevent combustion system leaks; or
   b.) Maintaining the maximum combustion zone pressure lower than ambient pressure using an instantaneous monitor; or
   c.) Upon prior written approval of the Director, an alternative means of control to provide control of combustion system leaks equivalent to maintenance of combustion zone pressure lower than ambient pressure; or
   d.) Upon prior written approval of the Director, other technique(s) which can be demonstrated to prevent fugitive emissions without use of instantaneous pressure limits; and

2.) The permittee shall specify in the performance test work plan and Notification of Compliance the method that will be used to control combustion system leaks. If permittee controls combustion system leaks by maintaining the combustion zone pressure lower than ambient pressure using an
instantaneous monitor, permittee shall also specify in the performance test work plan and Notification of Compliance the monitoring and recording frequency of the pressure monitor, and specify how the monitoring approach will be integrated into the automatic waste feed cutoff system. [§63.1206(c)(5)(i)-(ii)]

**Operator Training and Certification:**
1.) The permittee shall establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions of hazardous air pollutants from the source. Such persons include, but are not limited to, chief facility operators, control room operators, continuous monitoring system operators, persons that sample and analyze feed streams, persons that manage and charge feed streams to the combustor, persons that operate emission control devices, and ash and waste handlers. Each training program shall be of a technical level commensurate with the person's job duties specified in the training manual. Each commensurate training program shall require an examination to be administered by the instructor at the end of the training course. Passing of this test shall be deemed the “certification” for personnel, except that, for control room operators, the training and certification program shall be as specified in paragraphs §63.1206(c)(6)(iii) through §63.1206(c)(6)(vi).
2.) The permittee shall ensure that the source is operated and maintained at all times by persons who are trained and certified to perform these and any other duties that may affect emissions of hazardous air pollutants. A certified control room operator shall be on duty at the site at all times the source is in operation.
3.) The permittee shall ensure hazardous waste incinerator control room operators are:
   a.) Trained and certified under a site-specific, source-developed and implemented program that meets the requirements of §63.1206(c)(6)(v); or
   b.) Trained under the requirements of, and certified under, one of the following American Society of Mechanical Engineers (ASME) standards: QHO-1-1994, QHO-1a-1996, or QHO-1-2004 (Standard for the Qualification and Certification of Hazardous Waste Incinerator Operators). If permittee elects to use the ASME program, then:
      i.) Control room operators shall, prior to the compliance date, achieve provisional certification, and shall submit an application to ASME and be scheduled for the full certification exam. Within one year of the compliance date, control room operators shall achieve full certification;
      ii.) New operators and operators of new sources shall, before assuming their duties, achieve provisional certification, and shall submit an application to ASME, and be scheduled for the full certification exam. Within one year of assuming their duties, these operators shall achieve full certification; or
   c.) Trained and certified under a State program.
4.) The permittee shall record the operator training and certification program in the operating record. [§63.1206(c)(6)(i)-(iv)]

**Operation and Maintenance Plan:**
1.) The permittee shall prepare and at all times operate according to an operation and maintenance plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.
2.) The permittee’s plan shall prescribe how they operate and maintain the combustor in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test.

3.) The permittee’s plan shall ensure compliance with the operation and maintenance requirements of §63.6(e) and minimize emissions of pollutants, automatic waste feed cutoffs, and malfunctions.

4.) The permittee shall record the plan in the operating record. [§63.1206(c)(7)(i)-(iv)]

**Bag Leak Detection System Requirements:**

1.) The permittee shall continuously operate the combustor baghouse (fabric filter) with either:
   a.) A bag leak detection system that meets the specifications and requirements of §63.1206(c)(8)(ii) and shall comply with the corrective measures and notification requirements of §63.1206(c)(8)(iii) and §63.1206(iv); or
   b.) A particulate matter detection system under paragraph §63.1206(c)(9). [§63.1206(c)(8)]

**Changes in Design, Operation or Maintenance:**

1.) If the permittee plans to change (as defined in paragraph §63.1206(b)(5)(iii)) the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standards that is not monitored with a CEMS then the permittee shall:
   a.) Notify the Director at least 60 days prior to the change, unless the permittee documents the circumstances that dictate that such prior notice is not reasonably feasible.
   b.) The notification shall include:
      i.) A description of the changes and which emission standards may be affected; and
      ii.) A comprehensive performance test schedule and test plan under the requirements of §63.1207(f) that will document compliance with the affected emission standard(s);
   c.) Conduct a comprehensive performance test under the requirements of §§ 63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s) and establish operating parameter limits as required under §63.1209, and submit to the Director a Notification of Compliance under §§ 63.1207(j) and 63.1210(d); and
   d.) Except as provided by §63.1206(b)(5)(i)(C)(2), after the change and prior to submitting the notification of compliance, permittee shall not burn hazardous waste for more than a total of 720 hours (renewable at the discretion of the Director) and only for the purposes of pretesting or comprehensive performance testing. Pretesting is defined at §63.1207(h)(2)(i) and (ii).

2.) If permittee determines that a change will not adversely affect compliance with the emission standards or operating requirements, the permittee shall document the change in the operating record upon making such change. The permittee shall revise as necessary the performance test plan, Documentation of Compliance, Notification of Compliance, and start-up, shutdown, and malfunction plan to reflect these changes. [§63.1206(b)(5)]
Monitoring Requirements:
The permittee shall comply with the applicable monitoring requirements in §63.1209 which are as follows:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Monitoring Parameters</th>
<th>Pollutant/Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1209(k)(2)(ii)</td>
<td>Minimum Combustor Chamber Temperature (measured as Flame Temperature)</td>
<td>PCDDs/PCDFs (TEQ basis)</td>
</tr>
<tr>
<td>§63.1209(l)(1)(i)</td>
<td>Feedrate of total Mercury</td>
<td>Mercury</td>
</tr>
<tr>
<td>§63.1209(n)(2)(i)(A)</td>
<td>Maximum Feed Rate of SVM (Cd, Pb)</td>
<td>SVM - Cadmium and Lead</td>
</tr>
<tr>
<td>§63.1209(n)(2)(ii)</td>
<td>Maximum Feed Rate of LVM (AS, Be, Cr)</td>
<td>LVM - Arsenic, Beryllium and Chromium</td>
</tr>
<tr>
<td>§63.1209(a)(1)(i)</td>
<td>CO and Oxygen CEMS</td>
<td>Total Hydrocarbons</td>
</tr>
<tr>
<td>§63.1209(o)(1)</td>
<td>Maximum feed Rate of Chlorine/Chloride</td>
<td>Hydrogen Chloride &amp; Chlorine</td>
</tr>
<tr>
<td>§63.1209(m)(3)</td>
<td>Maximum Ash Feed Rate</td>
<td>Particulate Matter (PM)</td>
</tr>
<tr>
<td>§63.1209(j)(1)(ii)</td>
<td>Minimum Combustor Chamber Temperature (measured as Flame Temperature)</td>
<td>Destruction and Removal Efficiency (DRE)</td>
</tr>
<tr>
<td>§63.1209(j)(2)(i)</td>
<td>Minimum Flue Gas Flow Rate (measured as Combustion Air Flow Rate)</td>
<td></td>
</tr>
</tbody>
</table>

Performance Testing Requirements:
1.) Frequency of testing. The permittee shall conduct testing periodically as prescribed in paragraphs §63.1207(d)(1) through §63.1207(d)(3). The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. Permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. Unless the Director grants a time extension under paragraph §63.1207(i), permittee shall conduct testing as follows:
   a.) Permittee shall commence testing no later than 61 months after the date of commencing the previous comprehensive performance test used to show compliance with §63.1219. If data is submitted in lieu of the initial performance test, permittee shall commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test. [§63.1207(d)(1)]
   b.) Permittee shall commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test used to show compliance with §63.1219. If data is submitted in lieu of the initial performance test, permittee shall commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Director will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test. [§63.1207(d)(2)]
   c.) Permittee shall complete performance testing within 60 days after the date of commencement, unless the Director determines that a time extension is warranted based on permittee documentation in writing of factors beyond their control that prevent them from meeting the 60-day deadline. [§63.1207(d)(3)]
d.) Notification of performance test and CMS performance evaluation, and approval of test plan and CMS performance evaluation plan. The permittee shall comply with the provisions of §63.7(b) and (c) and §63.8(e) which apply, except:

i.) The permittee shall submit to the Director a notification of their intention to conduct a comprehensive performance test and CMS performance evaluation and a site-specific test plan and CMS performance evaluation test plan at least one year before the performance test and performance evaluation are scheduled to begin.

   (1) The Director will notify permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan.

   (2) Permittee shall submit to the Director a notification of their intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin. [§63.1207(e)(1)(i)]

e.) The permittee shall submit to the Director a notification of their intention to conduct a confirmatory performance test and CMS performance evaluation and a site-specific test plan and CMS performance evaluation test plan at least 60 calendar days before the performance test is scheduled to begin. The Director will notify permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 30 calendar days after receipt of the original test plans. [§63.1207(e)(1)(ii)]

f.) The permittee shall make their site-specific test plan and CMS performance evaluation test plan available to the public for review no later than 60 calendar days before initiation of the test. Permittee shall issue a public notice to all persons on their facility/public mailing list (developed pursuant to 40 CFR 70.7(h), 71.11(d)(3)(i)(E) and 124.10(c)(1)(ix)) announcing the availability of the test plans and the location where the test plans are available for review. The test plans shall be accessible to the public for 60 calendar days, beginning on the date that the public notice is issued. The location shall be unrestricted and provide access to the public during reasonable hours and provide a means for the public to obtain copies. The notification shall include the following information at a minimum: [§63.1207(e)(2)]

   i.) The name and telephone number of the source's contact person;

   ii.) The name and telephone number of the regulatory agency's contact person;

   iii.) The location where the test plans and any necessary supporting documentation can be reviewed and copied;

   iv.) The time period for which the test plans will be available for public review; and

   v.) An expected time period for commencement and completion of the performance test and CMS performance evaluation test.

g.) The permittee may petition the Director under §63.7(h) to obtain a “waiver” of any performance test—initial or periodic performance test; comprehensive or confirmatory test. The “waiver” would be implemented as an extension of time to conduct the performance test at a later date. [§63.1207(e)(3)]

i.) Procedures for obtaining a waiver and duration of the waiver.

   (1) Permittee shall submit to the Director a waiver petition or request to renew the petition under §63.7(h) separately for each source at least 60 days prior to the scheduled date of the performance test;

   (2) The Director will approve or deny the petition within 30 days of receipt and notify you promptly of the decision;

   (3) The Director will not approve an individual waiver petition for a duration exceeding 6 months;
(4) The Director will include a sunset provision in the waiver ending the waiver within 6 months;
(5) Permittee may submit a revised petition to renew the waiver under § 63.7(h)(3)(iii) at least 60 days prior to the end date of the most recently approved waiver petition;
(6) The Director may approve a revised petition for a total waiver period up to 12 months.

ii.) At the same time the permittee submits their petition to the Director, permittee shall notify the public (e.g., distribute a notice to the facility/public mailing list developed pursuant to 40 CFR 70.7(h), 71.11(d)(3)(i)(E) and 124.10(c)(1)(ix)) of permittee’s petition to waive a performance test.

**Recordkeeping Requirements:**
The permittee shall retain all appropriate records as specified in §63.10, §63.1200, §63.1206, §63.1209, and §63.1211 in their operating record. A listing of the potential records for retention includes the following:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Document, Data, or Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1200, §63.10(b) and (c)</td>
<td>General. Information required to document and maintain compliance with the regulations of Subpart EEE, including data recorded by continuous monitoring systems (CMS), and copies of all notifications, reports, plans, and other documents submitted to the Administrator.</td>
</tr>
<tr>
<td>§63.1206(b)(1)(ii)</td>
<td>If you elect to comply with all applicable requirements and standards promulgated under authority of the Clean Air Act, including Sections 112 and 129, in lieu of the requirements of Subpart EEE when not burning hazardous waste, you must document in the operating record that you are in compliance with those requirements.</td>
</tr>
<tr>
<td>§63.1206(b)(5)(ii)</td>
<td>Documentation that a change will not adversely affect compliance with the emission standards or operating requirements.</td>
</tr>
<tr>
<td>§63.1206(b)(11)</td>
<td>Calculation of hazardous waste residence time.</td>
</tr>
<tr>
<td>§63.1206(c)(2)</td>
<td>Startup, shutdown, and malfunction plan.</td>
</tr>
<tr>
<td>§63.1206(c)(2)(v)(A)</td>
<td>Documentation of your investigation and evaluation of excessive exceedances during malfunctions.</td>
</tr>
<tr>
<td>§63.1206(c)(3)(v)</td>
<td>Corrective measures for any automatic waste feed cutoff that results in an exceedance of an emission standard or operating parameter limit.</td>
</tr>
<tr>
<td>§63.1206(c)(3)(vii)</td>
<td>Documentation and results of the automatic waste feed cutoff operability testing.</td>
</tr>
<tr>
<td>§63.1206(c)(4)(ii)</td>
<td>Emergency safety vent operating plan.</td>
</tr>
<tr>
<td>§63.1206(c)(4)(iii)</td>
<td>Corrective measures for any emergency safety vent opening.</td>
</tr>
<tr>
<td>§63.1206(c)(5)(ii)</td>
<td>Method used for control of combustion system leaks.</td>
</tr>
<tr>
<td>§63.1206(c)(6)</td>
<td>Operator training and certification program.</td>
</tr>
</tbody>
</table>
### Reference | Document, Data, or Information
--- | ---
§63.1206(c)(7) | Operation and maintenance plan.
§63.1209(c)(2) | Feedstream analysis plan.
§63.1209(k)(6)(iii), §63.1209(k)(7)(ii), §63.1209(k)(9)(ii), §63.1209(o)(4)(iii) | Documentation that a substitute activated carbon, dioxin/furan formation reaction inhibitor, or dry scrubber sorbent will provide the same level of control as the original material.
§63.1209(k)(7)(i)(C) | Results of carbon bed performance monitoring.
§63.1209(q) | Documentation of changes in modes of operation.
§63.1211(c) | Documentation of compliance.

### Notification Requirements:
The permittee shall submit all applicable documents to the Director in accordance with the requirements of §63.9, §63.10, §63.1206, §63.1207, and §63.1210. A listing of the potential documents for submittal includes the following:

| Reference | Notification |
--- | ---
§63.9(j) | Notification and documentation of any change in information already provided under §63.9.
§63.1206(b)(5)(i) | Notification of changes in design, operation, or maintenance that may adversely affect compliance.
§63.1206(c)(8)(iv) | Notification of excessive bag leak detection system exceedances.
§63.1206(c)(9)(v) | Notification of excessive particulate matter detection system exceedances.
§63.1207(e), 63.9(e), §63.9(g)(1) and (3) | Notification of performance test and continuous monitoring system evaluation, including the performance test plan and CMS performance evaluation plan.
§63.1210(d), §63.1207(j), §63.1207(k), §63.1207(l), §63.9(h), §63.10(d)(2), §63.10(e)(2) | Notification of compliance, including results of performance tests and continuous monitoring system performance evaluations.

### Reporting Requirements:
1.) The permittee shall submit all applicable reports to the Director in accordance with the requirements of §63.10 and §63.1206. A listing of the potential reports for submittal includes the following:
2.) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C).1.C.(III).

### Permit Condition 5

**Emission and Operational Limitations:**

1.) **Annual Emission Limitation**
   a.) The Permittee shall emit less than ten (10.0) tons of hydrogen chloride (HCl) (CAS 7647-01-0) from the Propellant Thermal Treatment System (PTTS) in any consecutive twelve (12) month period. [Special Condition 2.A]

2.) **Hourly Emission Limitations**
   a.) The Permittee shall not discharge hydrogen chloride into the atmosphere from the stacks in excess of the listed amounts in Table 1: [Special Condition 3.A]
### Table 1: Hydrogen chloride (HCl) emission rate limits

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Description</th>
<th>Pollutant</th>
<th>Lbs/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-03</td>
<td>Incinerator Stack (Building 6)</td>
<td>HCl</td>
<td>1.305</td>
</tr>
<tr>
<td>EP-05</td>
<td>Propellant Thermal Treatment System (PTTS)</td>
<td>HCl</td>
<td>2.640</td>
</tr>
<tr>
<td>(Building 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-06</td>
<td>Static Kiln (Building 1)</td>
<td>HCl</td>
<td>0.052</td>
</tr>
<tr>
<td>EP-07</td>
<td>Thermal Treatment Units 1 &amp; 2 (Building 1)</td>
<td>HCl</td>
<td>0.190</td>
</tr>
<tr>
<td>EP-08</td>
<td>Thermal Treatment Units 3 &amp; 4 (Building 1)</td>
<td>HCl</td>
<td>0.190</td>
</tr>
</tbody>
</table>

b.) Continuous compliance with the emission rate limit for the PTTS (EP-05) shall be verified using a HCl continuous emission monitoring system (CEMS) [Special Condition 3.C]

3.) Continuous Emission Monitoring System (CEMS)

a.) The Permittee shall install, certify, operate, calibrate, test and maintain a CEMS to continuously monitor and record the HCl concentration in the PTTS exhaust stack (EP-05). [Special Condition 5.A]

b.) The CEMS shall be certified by the Air Pollution Control Program director after review and acceptance of a demonstration of conformance with Performance Specification Z, also referred to as Other Test Method (OTM) 23, “Procedure DD: Quality Control and Quality Assurance Requirements for Hydrochloric Acid Continuous Emissions Monitoring Systems at Stationary Sources”. The Permittee’s Quality Control and Quality Assurance (QA/QC) plan shall also adhere to the quality assurance procedures outlined in 40 CFR Part 60, Appendix F, Procedure 1, “Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determinations”. The Permittee shall submit its QA/QC plan for review and approval to the Air Pollution Control Program Compliance/Enforcement Section within 120 days of permit issuance. [Special Condition 5.B]

c.) The Permittee shall install, certify, operate, calibrate, test and maintain a continuous monitoring system to monitor and record the PTTS exhaust stack (EP-05) flow rate (corrected to standard dry conditions). [Special Condition 5.C]

d.) The Permittee shall use the CEMS data and the exhaust flow rate to calculate the average pounds HCl emitted per minute. [Special Condition 5.D]

i.) The Permittee shall verify compliance with the ten ton/year HCl emission limit by calculating the sum of all emissions measured. [Special Condition 5.E]

ii.) The Permittee shall verify continuous compliance with the PTTS (EP-05) emission rate limit specified in Table 1 by calculating a 60-minute rolling average of the measured emissions. [Special Condition 5.F]

4.) Propellant Thermal Treatment Operating and Maintenance Requirements

a.) The Permittee shall control the feed rate to the Propellant Thermal Treatment Chambers (EU1 and EU2) to a maximum of 1.01 tons (gross rocket motor weight) per hour. [Special Condition 6.A]

b.) The Permittee shall restrict the type of feed material to the Propellant Thermal Treatment Chambers (EU1 and EU2) to M26 Multiple Launch Rocket System rocket motor segments as specified in the construction permit application. [Special Condition 6.B]

c.) The Permittee shall develop an operation and maintenance plan that describes procedures for operation, inspection, maintenance, and corrective measures for all components of the PTTS, including the Propellant Thermal Treatment Chambers and the associated pollution control...
equipment. The plan shall be documented and available for review by any Missouri Department of Natural Resources’ personnel upon request. [Special Condition 6.D]

i.) The operating and maintenance plan shall include a corrective measures plan that specifies the procedures the Permittee will follow in the case of a bag leak detection system alarm or malfunction. The corrective measures plan must include, at a minimum, the procedures used to determine and record the time and cause of the alarm or bag leak detection system malfunction as well as the corrective measures taken to correct the control device or bag leak detection system malfunction. [Special Condition 9.D]

5.) Requirements for Future Alterations
   a.) The Permittee shall notify the Air Pollution Control Program before initial startup of any modifications to the facility design that could impact the release parameters or emission rates as specified in the Memorandum from the Modeling Unit entitled “Ambient Air Quality Impact Analysis (AAQIA) for General Dynamics Ordnance and Tactical Systems (General dynamics)” (November 15, 2011). In the event that the Program determines that the changes are significant, The Permittee shall submit an updated Ambient Air Quality Impact Analysis (AAQIA) to the Program that continues to demonstrate compliance with the Risk Assessment Levels for Hazardous Air Pollutants. [Special Condition 11]

**Equipment Requirements:**

1.) Capture Device Requirements:
   a.) The Permittee shall design, construct, and operate each Propellant Thermal Treatment Chamber (EU1 and EU2) to function as a total enclosure such that all emissions associated with the combustion of the rocket motor propellant are captured and exhausted to the air pollution control system (CD-1, CD-2, CD-3). [Special Condition 7.A]

2.) **Dry Scrubber (CD-1) Requirements**
   a.) The Permittee shall control HCl emissions from the PTTS using a dry scrubber as specified in the construction permit application. [Special Condition 8.A]

3.) **Baghouse (CD-2) Requirements:**
   a.) The Permittee shall control emissions from the PTTS using baghouses as specified in the construction permit application. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. Each baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources’ employees may easily observe them. Replacement filters for the baghouses shall be kept on hand at all times. [Special Condition 9.A]
   b.) The Permittee shall install and monitor a broken bag detector for each baghouse that indicates when a baghouse has exceeded an emission rate of one (1.0) milligram per actual cubic meter of particulate matter. [Special Condition 9.C]

4.) **Wet Scrubber (CD-3) Requirements:**
   a.) The Permittee shall control HCl emissions from the PTTS using a packed bed wet scrubber as specified in the construction permit application. [Special Condition 10.A]

**Monitoring:**

1.) Emission Limits:
   a.) Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance the 10 tons/year HCl limit [Special Condition 2.B]

2.) Propellant Thermal Treatment System (PTTS):
a.) The Permittee shall maintain an operating and maintenance log for the PTTS which shall include the following: [Special Condition 6.E]
   i.) Incidents of malfunction, with impact on emissions, time, date and duration of event, probable cause, and corrective actions; and
   ii.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

3.) **Capture Device:**
   a.) The Permittee shall continuously monitor and record the static pressure inside the PTTC near the ash discharge conveyor. [Special Condition 7.C]
   i.) At least one time per calendar year (no less than 9 calendar months and no more than 15 calendar months following the previous calibration), the Permittee shall calibrate the static pressure gage and verify the actual face velocity at each natural draft opening exceeds 200 feet per minute at all times during the combustion cycle. [Special Condition 7.D]
   b.) The Permittee shall maintain an operating and maintenance log associated with the ventilation of the Propellant Thermal Treatment Chambers which shall include the following: [Special Condition 7.E]
   i.) Incidents of malfunction, with impact on emissions, time, date and duration of event, probable cause, and corrective actions; and
   ii.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

4.) **Dry Scrubber (CD-1):**
   a.) The Permittee shall develop and implement a control device monitoring plan to verify the proper operation of the dry scrubber. The plan shall be documented and available for review by any Missouri Department of Natural Resources’ personnel upon request. At a minimum, the plan shall include the following: [Special Condition 8.B]
   i.) A minimum sorbent feed rate on a 60-minute rolling average; and
   ii.) A sorbent blower operating signal; and
   iii.) The sorbent specifications, including the brand (i.e. manufacturer) and type of sorbent used during the initial performance test. The sorbent may be substituted at any time after the initial performance test with a different brand or type of sorbent, provided that the replacement has equivalent or improved properties. The substitution shall be documented in the control device monitoring plan for the dry scrubber and also in the operating and maintenance logs for the Propellant Thermal Treatment Chambers and the air pollution control system (CD-1, CD-2, CD-3).
   b.) The Permittee shall record the monitoring parameters as specified in the control device monitoring plan at least once every hour. The monitored parameters shall be maintained within design conditions specified in the plan. [Special Condition 8.C]
   c.) The Permittee shall maintain an operating and maintenance log for the dry scrubber and auxiliary equipment which shall include the following: [Special Condition 8.D]
   i.) Incidents of malfunction, with impact on emissions, time, date and duration of event, probable cause, and corrective actions; and
   ii.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5.) **Baghouse (CD-2):**
   a.) The Permittee shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty. [Special Condition 9.B]
   b.) The Permittee shall maintain an operating and maintenance log for the baghouses which shall include the following: [Special Condition 9.E]
   i.) Incidents of malfunction, including bag leak detection system alarms, with impact on
emissions, time, date and duration of event, probable cause, and corrective actions; and
ii.) The percent of the operating time during each 6-month period that the PTTS operates
during malfunction events, including bag leak detection system alarms,
iii.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

6.) **Wet Scrubber (CD-3):**
   a.) The Permittee shall develop and implement a control device monitoring plan to verify proper
   operation of the wet scrubber. The plan shall be documented and available for review by any
   Missouri Department of Natural Resources’ personnel upon request. At a minimum, the plan
   shall include the following: [Special Condition 10.B]
   i.) A minimum pressure drop across the wet scrubber on a 60-minute rolling average; and
   ii.) A minimum pH on a 60-minute rolling average; and
   iii.) A minimum scrubber water flow rate on a 60-minute rolling average; and
   iv.) A maximum flue gas flow rate on a 60-minute rolling average.
   b.) The Permittee shall record the monitoring parameters as specified in the control device
   monitoring plan at least once every hour. The monitored parameters shall be maintained within
   design conditions specified in the plan. [Special Condition 10.C]
   c.) The Permittee shall maintain an operating and maintenance log for the wet scrubber which shall
   include the following: [Special Condition 10.D]
   i.) Incidents of malfunction, with impact on emissions, time, date and duration of event,
      probable cause, and corrective actions; and
   ii.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

**Recordkeeping:**
1.) The Permittee shall keep documentation sufficient to support all required emission calculations for
   not less than five years. [Special Condition 5.G]
2.) The Permittee shall record the total amount of rocket motor segments combusted in each Propellant
   Thermal Treatment Chambers (EU1 and EU2) in units of gross motor weight at least once every day.
   [Special Condition 6.C]
3.) These records shall be made available immediately for inspection to the Department of Natural
   Resources' personnel upon request.

**Reporting:**
1.) **Capture Device Requirements**
   a.) For each set of ten incidents of malfunction, including emergency safety releases, resulting in
   fugitive emissions of propellant combustion emissions during a 90-day consecutive period, The
   Permittee shall submit to the Air Pollution Control Program’s Compliance/Enforcement Section
   a written report within 30 calendar days of the 10th exceedance documenting the incidents, the
   results of the investigations, and the corrective measures taken. [Special Condition 7.F]
2.) **Baghouse (CD-2) Requirements**
   a.) If the duration of malfunction events exceed five percent of the total operating time recorded
   within a six-month block period, the Permittee shall submit to the Air Pollution Control
   Program’s Compliance/Enforcement Section a written report within 30 calendar days at the end
   of the six-month period that describes the causes of the baghouse malfunctions and the corrective
   actions taken to minimize these events. [Special Condition 9.F]
3.) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

### Permit Condition 6

10 CSR 10-6.060 *Construction Permits Required*

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
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<tbody>
<tr>
<td>EP04</td>
<td>Emergency Generator, 676 hp, diesel fired (1994)</td>
<td>Caterpillar/ 3412T</td>
</tr>
</tbody>
</table>

**Emission Limitation:**
The permittee shall not operate the Caterpillar Model 3412T power generator more than ninety-one (91) hours in any consecutive twelve (12) month period. [Special Condition 1]

**Monitoring:**
The permittee shall provide a non-resetable hour meter as part of the generator set in order to quantify its hours of operation. [Special Condition 2]

**Recordkeeping:**
The permittee shall maintain records on-site, covering a period of the previous sixty months, which show the hours of operation of the Caterpillar Model 3412T power generator set on a monthly basis. These records shall be made immediately available to Department of Natural Resources’ personnel upon verbal request. [Special Condition 3]

**Reporting:**
The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than fifteen (15) days after the end of each month, if the twelve (12) month cumulative total shows that the facility exceeded the annual usage limitations of 91 hours. [Special Condition 4]

### Permit Condition 7

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds*

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<th>EIQ Reference</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
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**Emission Limitation:**
1.) Emissions from any new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide. [10 CSR 10-6.260(3)(A)2]
2.) Emissions from any new source operation shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period. [10 CSR 10-6.260(3)(A)2]
**Operational Limitation/Equipment Specifications:**
The emission unit shall be limited to burning #2 fuel oil with a sulfur content of no more than 0.5% weight sulfur.

**Monitoring/Recordkeeping:**
1.) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
2.) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3.) All records shall be maintained for five years.

**Reporting:**
The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)(III).

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
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</table>

1.) The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, (Ultra Low Sulfur Diesel (ULSD) 15 ppm) [§60.4207(b)]
2.) The engines shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g). [§60.4211(c)]
3.) The permittee shall do all of the following, except as permitted under §60.4211(g):
   a.) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
   b.) Change only those emission-related settings that are permitted by the manufacturer; and
   c.) Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to you. [§60.4211(a)(1) through (a)(3), and §60.4211(c)]
4.) If the permittee does not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: [§60.4211(g)]
   a.) The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related
written instructions, or within one year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [§60.4211(g)(2)]

5.) The permittee shall operate the emergency stationary ICE according to the requirements in paragraphs §60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart III, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs §60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs §60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4211(f)]

a.) There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1)]

b.) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs §60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph §60.4211(f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph §60.4211(f)(2). [§60.4211(f)(2)]

i.) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [§60.4211(f)(2)(i)]

ii.) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [§60.4211(f)(2)(ii)]

iii.) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [§60.4211(f)(2)(iii)]

c.) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph §60.4211(f)(2). Except as provided in paragraph §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [§60.4211(f)(3)]

i.) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§60.4211(f)(3)(i)(A) through (E)]

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(4) The power is provided only to the facility itself or to support the local transmission and distribution system.

(5) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

**Reporting:**
The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).
IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.

2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:

a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
   i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
   ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
   iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
   iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;

b) Yard waste, with the following exceptions:
   i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
   ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
   iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      (4) In each instance, the twenty-one (21)-day burning period shall be determined by the director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department director; and
iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;

3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

4) GD-OTS MS may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if GD-OTS MS fails to comply with the provisions or any condition of the open burning permit.

a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.

5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.


10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:

a) Name and location of installation;
b) Name and telephone number of person responsible for the installation;
c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
d) Identity of the equipment causing the excess emissions;
e) Time and duration of the period of excess emissions;
f) Cause of the excess emissions;
g) Air pollutants involved;
h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
i) Measures taken to mitigate the extent and duration of the excess emissions; and
j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.

3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.

4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.

5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]


1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

**10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
2) The permittee may be required by the director to file additional reports.
3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.
6) The permittee shall complete required reports on state supplied EIQ forms or in a form satisfactory to the director and the reports shall be submitted to the director by June 1 after the end of each reporting period.
7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

**10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

**10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

**10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

**Emission Limitation:**

1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.

2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.090 Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

This requirement is not federally enforceable.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.
Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
   d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. (*MVAC-like* appliance as defined at §82.152).
   e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
   f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

<table>
<thead>
<tr>
<th>10 CSR 10-6.280 Compliance Monitoring Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:</td>
</tr>
</tbody>
</table>
a) Monitoring methods outlined in 40 CFR Part 64;
b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
c) Any other monitoring methods approved by the director.

2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
   c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, “Sampling Methods for Air Pollution Sources”;
      ii) 10 CSR 10-6.040, “Reference Methods”;
      iii) 10 CSR 10-6.070, “New Source Performance Standards”;
      iv) 10 CSR 10-6.080, “Emission Standards for Hazardous Air Pollutants”; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.
V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

<table>
<thead>
<tr>
<th>10 CSR 10-6.065(6)(C)1.B Permit Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Recordkeeping</td>
</tr>
<tr>
<td>a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.</td>
</tr>
<tr>
<td>b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources’ personnel upon request.</td>
</tr>
<tr>
<td>2) Reporting</td>
</tr>
<tr>
<td>a) All reports shall be submitted to the Air Pollution Control Program’s Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.</td>
</tr>
</tbody>
</table>
| b) The permittee shall submit a report of all required monitoring by:
  i) October 1st for monitoring which covers the January through June time period, and
  ii) April 1st for monitoring which covers the July through December time period. |
| iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken. |
| c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances. |
| d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken. |
| i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken. |
ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)
The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:
1) June 21, 1999;
2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause
In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements
1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to
the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

**10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

**10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios**

None.

**10 CSR 10-6.065(6)(C)3 Compliance Requirements**

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.

2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation’s right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.

3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, as well as the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;
   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
c) Whether compliance was continuous or intermittent;
d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6  Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The application requirements are included and specifically identified in this permit, or
   b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.

2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7  Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8  Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable
under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.

a) Before making a change under this provision, the permittee shall provide advance written notice to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days’ notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.

b) The permit shield shall not apply to these changes.

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10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;

b) The permittee must provide written notice of the change to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

d) The permit shield shall not apply to these changes.
10 CSR 10-6.020(2)(R)12  Responsible Official

The application utilized in the preparation of this permit was signed by David R. Zoghby, VP & Business Director. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6  Reopening-Permit for Cause

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,

2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,

3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,

4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or

5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C  Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.
## Attachment A – Monthly Hydrogen Chloride Compliance Worksheet

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month/Year</td>
<td>Current Month’s Monthly HCl Emissions Total (tons per month)</td>
<td>Last Month’s 12-Month HCl Emissions Total (tons per year)</td>
<td>Previous Year’s Monthly HCl Emissions Total (tons per month)</td>
<td>Current Month’s 12-month HCl Emissions Total (tons per year)</td>
</tr>
</tbody>
</table>

Column 1 = current month and year  
Column 2 = current month’s monthly HCl emissions total in tons per month  
Column 3 = last month’s 12-Month HCl emissions total in tons per year  
Column 4 = previous year’s monthly HCl emissions total in tons per month  
Column 5 = \([\text{Column 2}] + [\text{Column 3}] - [\text{Column 4}]\)

HCl emissions are calculated using CEMS data (HCL concentration, actual stack gas temperature, actual stack gas flow) according to the following formula:

$$
\text{HCl emissions} = X \text{ ppmv} \times \left( \frac{36.45 \text{ lb}}{\text{lb} \cdot \text{mol}} \right) \times \left( \frac{2.595 \times 10^{-9} \text{ lb} \cdot \text{mol}}{\text{dscfm}} \right) \times Y \text{ dscfm}
$$

Where:
- $X_{\text{ppmv}}$ = measured concentration of HCl in exhaust stack gas (EP-05) parts per million by volume (ppmv)
- 36.45 lb per lb·mol = molecular weight of HCl
- $Y_{\text{dscfm}}$ = measured exhaust stack (EP-05) gas volumetric flow corrected to dry standard cubic feet per minute (dscfm)
- $2.595 \times 10^{-9}$ lb·mol/dscfm = conversion factor

**Instructions:** This worksheet must account for all hydrogen chloride (HCl) emissions from the propellant thermal treatment system. A 12-Month HCl emissions total [Column 5] of less than 10.0 tons indicates compliance.
## Attachment B - Automatic Waste Feed Cutoff (AWFCO) Summary

<table>
<thead>
<tr>
<th>Operating Parameter</th>
<th>MACT Setpoint</th>
<th>Monitoring Device Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Hazardous Waste Feed</td>
<td>3,055 lbs/hr</td>
<td>ME-108 A/B Feed Room</td>
</tr>
<tr>
<td>Rotary Kiln Pressure</td>
<td>-0.0&quot; wc Instantaneous</td>
<td>PA – 105 Kiln Feed Housing</td>
</tr>
<tr>
<td>Low Secondary Combustor Temperature</td>
<td>1819°F (HRA)</td>
<td>TT – 268 Secondary Combustor</td>
</tr>
<tr>
<td>Minimum Soda Ash Solution Rate</td>
<td>0.3 gpm or calculation rate</td>
<td>FT – 313 Soda Ash Pump</td>
</tr>
<tr>
<td>High Spray Dryer Exit Temperature</td>
<td>375°F (HRA)</td>
<td>TT – 308 Spray Dryer Exit</td>
</tr>
<tr>
<td>Baghouse Differential Pressure</td>
<td>≤5.8 “ wc (HRA) &gt;12.0 “ wc (HRA)</td>
<td>DP – 359 Duct (before &amp; after) Baghouse</td>
</tr>
<tr>
<td>Baghouse Bypass Damper</td>
<td>Open</td>
<td>ZS – 358 Bypass Damper</td>
</tr>
<tr>
<td>Broken Bag Detector</td>
<td>100</td>
<td>XS–355, 362, 372 Outlet of each chamber</td>
</tr>
<tr>
<td>High Gas Flow Rate</td>
<td>641,334 scfh (HRA)</td>
<td>FT – 412 Stack</td>
</tr>
<tr>
<td>CO</td>
<td>100 ppmv (HRA)</td>
<td>AT – 407 Stack</td>
</tr>
<tr>
<td>O₂</td>
<td>3% (HRA)</td>
<td>AT – 409 Stack</td>
</tr>
<tr>
<td>Total Chlorine Feed</td>
<td>110.1 lb/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Total Ash Feed</td>
<td>663.4 lb/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Total Lead Feed</td>
<td>92.0 lb/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Total Cadmium Feed</td>
<td>9.2 lb/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Total Chromium Feed</td>
<td>44.8 lb/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Total Beryllium Feed</td>
<td>20.16 lb/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Total Mercury Feed</td>
<td>0.676 gr/hr (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>SVM Emissions</td>
<td>0.1725 mg/dscm (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>LVM Emissions</td>
<td>0.069 mg/dscm (12HRA)</td>
<td>CMS</td>
</tr>
<tr>
<td>Mercury Emissions</td>
<td>0.130 mg/dscm (12HRA)</td>
<td>CMS</td>
</tr>
</tbody>
</table>

AWFCO Parameters from Notice of Compliance and the Report for the Comprehensive Performance Test completed on June 16, 2011.
STATEMENT OF BASIS

Permit Reference Documents
These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit Application, received October 13, 2005;
2) 2011 Emissions Inventory Questionnaire; and

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits
In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

Other Air Regulations Determined Not to Apply to the Operating Permit
The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*
This rule is not applicable because the installation is in an ozone attainment area.

Construction Permit Revisions
Construction Permits issued to this facility (097-0138) from the Air Pollution Control Program:

<table>
<thead>
<tr>
<th>Construction Permit Number</th>
<th>Description</th>
<th>Operating Permit Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>0990-002</td>
<td>The installation of two (2) hazardous waste incinerators.</td>
<td>N/A – replaced with Construction Permit #0990-002B</td>
</tr>
<tr>
<td>0894-007</td>
<td>The installation of a diesel fired emergency generator.</td>
<td>Permit Condition 6</td>
</tr>
<tr>
<td>0990-002B</td>
<td>Amendment to permit 0990-002 for the elimination of the direct liquid feed system for the incinerator.</td>
<td>Permit Condition 3</td>
</tr>
<tr>
<td>1293-010</td>
<td>The construction of a storage feed handling building.</td>
<td>Permit Condition 1</td>
</tr>
<tr>
<td>072009-004</td>
<td>The installation of a thermal treatment system for the treatment and disposal of MLRS rocket motors (ammonium perchlorate – based propellant).</td>
<td>N/A – Construction Permits superseded by CP # 122012-001</td>
</tr>
<tr>
<td>072009-004A</td>
<td>An amendment to correct the as-built maximum design rate of the propellant thermal treatment chambers.</td>
<td>Permit Condition 5</td>
</tr>
<tr>
<td>122012-001</td>
<td>Modification of the thermal treatment process for the treatment and disposal of rocket motor propellant. This permit supersedes the special conditions in permit 072009-004 and permit amendment 072009-004A.</td>
<td>Permit Condition 5</td>
</tr>
</tbody>
</table>

MLRS=Multiple Launch Rocket System
The following revision was made to construction permits for this installation:

1) **Construction Permit 0990-002B**; At the time of issuance of Construction Permit 0990-002B, the incinerator and car bottom furnace were the only emission units present at the facility. Special Condition 12 of Construction Permit 0990-002B has been reworded to use the term “emission unit” instead of facility. The special conditions of construction permit 0990-002B were also reformatted for consistency and obsolete conditions (such as one time source testing) omitted.

2) **Construction Permit 122012-001**; The special conditions of Construction Permit 122012-001 were reformatted for consistency and obsolete conditions (such as one time source testing) omitted.

**New Source Performance Standards (NSPS) Applicability**

40 CFR 60 Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
</table>

Although subject to NSPS IIII, there are no initial notification submittal requirements for these units per §60.4214(b)

**Maximum Achievable Control Technology (MACT) Applicability**


<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-03</td>
<td>Incinerator Stack (Building 6)</td>
</tr>
<tr>
<td>EP-05</td>
<td>Propellant Thermal Treatment Units 1 &amp; 2 (Building 3)</td>
</tr>
<tr>
<td>EP-06</td>
<td>Static Kiln (Building 1)</td>
</tr>
<tr>
<td>EP-07</td>
<td>Thermal Treatment Units 1 &amp; 2 (Building 1)</td>
</tr>
<tr>
<td>EP-08</td>
<td>Thermal Treatment Units 3 &amp; 4 (Building 1)</td>
</tr>
</tbody>
</table>

The incinerators in Building 6 (EP-3) are subject to the Hazardous Waste Combustors (HWC) MACT under 40 CFR 63 Subpart EEE. The units are currently complying with the MACT EEE replacement standards under §63.1219. (*See Permit Condition 4*)

The HWC MACT standard does not apply to the PTTS (EP-05), Static Kiln (EP-06) and Thermal Treatment Units (EP-07 & EP-08) because the units do not meet the 40 CFR 260.10 definition of an incinerator as referenced in the HWC MACT.

40 CFR Part 63, Subpart ZZZZ--*National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines*

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
</table>

§63.6590(b)(3)(iii) states that existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions do not have to meet the emission limitations and
operating limitations of MACT ZZZZ. Per §63.6675, all emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under MACT ZZZZ.

Permit Condition 6 (Construction Permit 0894-007) limits the total annual usage to 91 hours/year, which is more stringent than the usage limitation of §63.6640(f). For this reason, the provisions of §63.6640(f) were not placed into this permit for this unit.

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
</table>

§63.6590(c)(7) states that a new or reconstructed compression ignition (CI) stationary RICE ≤ 500 brake HP located at a major source of HAP emissions must meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR Part 60 subpart IIII. No further requirements apply for such engines under 40 CFR Part 63. (See Permit Condition 8)


<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC 01</td>
<td>1 MMBtu/hour, Natural gas, Storage Feed Handling Building</td>
</tr>
<tr>
<td>HVAC 02</td>
<td>1 MMBtu/hour, Natural gas, Kiln Feed Room and Control Room</td>
</tr>
<tr>
<td>HVAC 03</td>
<td>0.2 MMBtu/hour, Natural gas, Field Office</td>
</tr>
<tr>
<td>HVAC 04</td>
<td>0.4 MMBtu/hour, Natural gas, Building #2</td>
</tr>
<tr>
<td>HVAC 05</td>
<td>0.4 MMBtu/hour, Natural gas, Building #3</td>
</tr>
<tr>
<td>HVAC 06</td>
<td>0.4 MMBtu/hour, Natural gas, Building #4</td>
</tr>
<tr>
<td>EP-03</td>
<td>Rotary Kiln Incinerator, Natural gas (4 MMBtu)</td>
</tr>
<tr>
<td></td>
<td>Car Bottom Furnace, Natural gas (3.6 MMBtu)</td>
</tr>
<tr>
<td></td>
<td>Secondary Combustor, Natural gas (12 MMBtu)</td>
</tr>
</tbody>
</table>

From the definitions section of MACT DDDD:

*Boiler* means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water.

Since these small units (HVAC-01 through 06) are direct heat sources, they do not meet the definition of a boiler, and are not subject to this rule.

The combustion units referenced as EP-03 in the table are regulated under MACT EEE and are exempt from MACT DDDD per §63.7491(m).

**Compliance Assurance Monitoring (CAM) Applicability**

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.
40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

**Other Regulatory Determinations**

10 CSR 10-6.065 Operating Permits

40 CFR 63 Subpart EEE requires that all affected facilities acquire a part 70 operating permit, according to §63.1200(a)(2). This facility has four de minimis construction permits (#1293-010 (*Storage/Feed Handling Building*), #0894-007 (*Emergency Generator*), #0990-002B (*incinerator, and car bottom furnace*), and #122012-001 (*Thermal Treatment units*) that are currently still applicable.

Special Condition 3.A of Construction Permit 012012-001 (*see Permit Condition 5*) limits the HCl emitted on a pound/hour basis from the following listed units:

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Description</th>
<th>HCl limits (lb/hr)</th>
<th>HCl PTE(^3) (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-03</td>
<td>Incinerator Stack (Building 6)(^1)</td>
<td>1.305</td>
<td>5.716</td>
</tr>
<tr>
<td>EP-05</td>
<td>PTTS (Building 3)</td>
<td>2.64</td>
<td>10</td>
</tr>
<tr>
<td>EP-06</td>
<td>Static Kiln (Building 1)</td>
<td>0.052</td>
<td>0.23</td>
</tr>
<tr>
<td>EP-07</td>
<td>Thermal Treatment Unit 1 &amp; 2 (Building 1)</td>
<td>0.19</td>
<td>0.83</td>
</tr>
<tr>
<td>EP-08</td>
<td>Thermal Treatment Unit 3 &amp; 4 (Building 1)</td>
<td>0.19</td>
<td>0.83</td>
</tr>
</tbody>
</table>

HCl facility wide PTE (tpy) 17.61

\(^1\) The incinerator is limited to de minimis levels by permit 0990-002B (*see Permit Condition 3*).

\(^2\) The Potential to Emit (PTE) for HCl was determined using 8760 hours/year and accounting for the 10 ton/year HAP limit for the PTTS (*See Permit Condition 5*).

Assuming the units can reach those limits, the PTE is shown to be major for HAP (HCl).

<table>
<thead>
<tr>
<th>Criteria Pollutant</th>
<th>(^1)Emergency Generators, Fire Pump and Combustion Sources</th>
<th>(^2)Storage/Feed Handling Building</th>
<th>PTE (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAP</td>
<td>0.85</td>
<td>--</td>
<td>18.46</td>
</tr>
<tr>
<td>SOx</td>
<td>0.22</td>
<td>--</td>
<td>0.22</td>
</tr>
<tr>
<td>NOx</td>
<td>11.71</td>
<td>--</td>
<td>11.71</td>
</tr>
<tr>
<td>CO</td>
<td>8.53</td>
<td>--</td>
<td>8.53</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>0.86</td>
<td>0.75</td>
<td>3.01</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>0.86</td>
<td>--</td>
<td>0.86</td>
</tr>
<tr>
<td>VOC</td>
<td>0.54</td>
<td>7.5</td>
<td>8.04</td>
</tr>
<tr>
<td>CO2e</td>
<td>11.622</td>
<td>--</td>
<td>11.622</td>
</tr>
</tbody>
</table>

\(^1\) Combustion sources include those sources listed in the Combustion Sources table found under the previous discussion for MACT DDDDD (*above*). Emission factors were taken from FIRE using SCC 10200602. Emergency RICE (EP-09, and 10) were evaluated at 500 hours/year. EP-04 was evaluated at 91 hours/year per Construction Permit 0894-007 (*see Permit Condition 6*). The remaining combustion sources were evaluated at 8760 hours/year.

\(^2\) PTE obtained from Construction Permit 1293-010. PTE for PM\(_{2.5}\) was not provided.
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

10 CSR 10-6.220 applies to all sources of visible emissions. The following table illustrates monitoring requirements by source (if any) that demonstrates/ensures compliance with the rule.

<table>
<thead>
<tr>
<th>EIQ reference</th>
<th>Emission unit</th>
<th>10 CSR 10-6.220 provisions placed in this permit for this unit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP01</td>
<td>Storage Feed Handling Building Vent #1</td>
<td>No – Anticipated emission rates from Construction Permit 1293-010 are not such (0.08 lb/hr @ MHDR) that it is expected to exceed the 20% opacity limitation.</td>
</tr>
<tr>
<td>EP02</td>
<td>Storage Feed Handling Building Vent #2</td>
<td></td>
</tr>
<tr>
<td>EP03</td>
<td>Incinerator Stack (includes Rotary Kiln Incinerator, Car Bottom Furnace, and Secondary Combustor)</td>
<td>No - Equivalent standard located in Permit Condition 3</td>
</tr>
<tr>
<td>EP05</td>
<td>Building #3 (PTTU 1 and PTTU 2 )</td>
<td></td>
</tr>
<tr>
<td>EP06</td>
<td>Building #1 Static Kilns (4)</td>
<td></td>
</tr>
<tr>
<td>EP07</td>
<td>Building #1 ICM Thermal Treatment Units 1 &amp; 2</td>
<td></td>
</tr>
<tr>
<td>EP08</td>
<td>Building #1 ICM Thermal Treatment Units 3 &amp; 4</td>
<td></td>
</tr>
<tr>
<td>EP09</td>
<td>Building #3 Emergency Generator, 490 hp, diesel fired</td>
<td></td>
</tr>
<tr>
<td>EP10</td>
<td>Emergency Fire Water Pump, 173 hp, diesel fired</td>
<td></td>
</tr>
<tr>
<td>HVAC 01</td>
<td>1 MMBtu, Natural gas, Storage Feed Handling Building</td>
<td>No - Small natural gas units are inherently compliant with the 20% opacity limit.</td>
</tr>
<tr>
<td>HVAC 02</td>
<td>1 MMBtu, Natural gas, Kiln Feed Room &amp; Control Room</td>
<td></td>
</tr>
<tr>
<td>HVAC 03</td>
<td>0.2 MMBtu/hour, Natural gas, Field Office</td>
<td></td>
</tr>
<tr>
<td>HVAC 04</td>
<td>0.4 MMBtu/hour, Natural gas, Building #2</td>
<td></td>
</tr>
<tr>
<td>HVAC 05</td>
<td>0.4 MMBtu/hour, Natural gas, Building #3</td>
<td></td>
</tr>
<tr>
<td>HVAC 06</td>
<td>0.4 MMBtu/hour, Natural gas, Building #4</td>
<td></td>
</tr>
</tbody>
</table>

10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

<table>
<thead>
<tr>
<th>EIQ reference</th>
<th>Emission unit</th>
<th>6.400 Applicable?</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP01</td>
<td>Storage Feed Handling Building Vent #1</td>
<td>No</td>
<td>&gt;90% control requirement from Permit Condition 1</td>
</tr>
<tr>
<td>EP02</td>
<td>Storage Feed Handling Building Vent #2</td>
<td>No</td>
<td>&gt;90% control requirement from Permit Condition 1</td>
</tr>
<tr>
<td>EP03</td>
<td>Incinerator Stack (includes Rotary Kiln Incinerator, Car Bottom Furnace, and Secondary Combustor)</td>
<td>No</td>
<td>HWC MACT PM Standard in Permit Condition 4 is more restrictive</td>
</tr>
<tr>
<td>EP05</td>
<td>Building #3 (PTTU 1 and PTTU 2 )</td>
<td>No</td>
<td>&gt;90% control requirement from Permit Condition 5</td>
</tr>
<tr>
<td>EP06</td>
<td>Building #1 Static Kilns (4)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>EP07</td>
<td>Building #1 ICM Thermal Treatment Units 1&amp;2</td>
<td>No</td>
<td>&gt;90% control requirement (See explanation below)</td>
</tr>
<tr>
<td>EP08</td>
<td>Building #1 ICM Thermal Treatment Units 3&amp;4</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
10 CSR 10-6.400(B)15 states that the provisions of this rule shall not apply to any particulate matter emission unit that is subject to a federally enforceable requirement to install, operate, and maintain a particulate matter control device system that controls at least ninety percent (90%) of particulate matter emissions.

For informational purposes, and to demonstrate satisfactory emission capture and control to meet the exemption of 10 CSR 10-6.400(B)15, the following Special Permit Conditions were excerpted from Section II of the current RCRA permit for the Static Kilns (EP-06) and the ICM Thermal Treatment Units (EP07 & EP-08);

SPECIAL PERMIT CONDITION II.B.1 - Improved Conventional Munition (ICM) Thermal Treatment Units in Building #1 - An ICM Thermal Treatment Unit system consists of two (2) treatment units in a pair that share a common air pollution control system for the thermal treatment of the bodies containing the explosive filler and the copper cone from M42, M46 or M77 United States military submunitions by igniting them and letting them burn within the burn chamber. Two complete systems are used for treatment. Both systems as well as the two thermal treatment units within each system may be used simultaneously. Each thermal treatment unit consists of a burn chamber and pilot/ignition flame used to ignite the explosives.

An air pollution control system (APCS) is used to control the discharge of air pollutants to the atmosphere from the treatment of explosive filler in the submunition. The APCS utilizes filters for the control of particulate matter. From each pair of treatment units, the hot gases evolved from the burning of the explosive filler plus air drawn into the treatment unit to support treatment and to prevent fugitive emissions are drafted in the common (of each pair) air pollution control equipment consisting of a cartridge filter bag house and a high-efficiency particulate air (HEPA) filter. An induced draft fan moves the gases evolved from the static kilns through the cartridge filter bag house discharging the entire flow through the HEPA filter and a stack.

SPECIAL PERMIT CONDITION II.B.2 - Static Kiln Thermal Treatment Units in Building #1 - The Static Kiln Thermal Treatment Unit system consists of four (4) vertical static kilns all sharing a common air pollution control system for the thermal treatment of fuses from M42, M46 or M77 United States military submunitions by electrically heating the static kiln to a temperature that will detonate the fuse. Only one static kiln shall be operated for the thermal treatment of fuses at a time. The remaining three (3) static kilns may be heating, cooling or being emptied of treatment residues.

An air pollution control system (APCS) is used to control the discharge of air pollutants to the atmosphere from the treatment of fuses. The APCS utilizes filters for the control of particulate matter. From each static kiln, the hot gases evolved from the detonation of the fuse plus air drawn into the treatment unit to support treatment and to prevent fugitive emissions are drafted in the common air pollution control equipment consisting of a cartridge filter bag house and a high-efficiency particulate air (HEPA) filter. An induced draft fan moves the gases evolved from the static kilns through the cartridge filter bag house discharging the entire flow through the HEPA filter and a stack.

SPECIAL PERMIT CONDITION II.F. - Control of Fugitive Emissions

1) The Permittee shall operate, inspect and maintain all systems and equipment necessary to prevent fugitive emissions from the Building #1 Thermal Treatment Units. The Permittee shall not operate the treatment units if visible emissions are evident. The Permittee at a minimum shall operate each
treatment unit burn chamber in accordance with Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR §52.741, Appendix B.

2) The Permittee shall operate, inspect and maintain all systems and equipment necessary to prevent fugitive emissions from the Building #1 Static Kiln Units. The Permittee shall not operate the treatment units if visible emissions are evident. The Permittee at a minimum shall operate each static kiln in accordance with Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR § 52.741, Appendix B.

3) The Permittee shall operate, inspect and maintain all systems and equipment necessary to prevent fugitive emissions from the Building #3 Propellant Treatment Units. The Permittee shall not operate the treatment units if visible emissions are evident. The Permittee at a minimum shall operate each propellant burn chamber in accordance with Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR § 52.741, Appendix B.

The treatment units are regulated under a federally enforceable permit and in a manner that would meet the 90% control exemption of 10 CSR 10-6.400(B)15. For these reasons, no provisions from 10 CSR 10-6.400 were placed into this permit for these units.

**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1) The specific pollutant regulated by that rule is not emitted by the installation;
2) The installation is not in the source category regulated by that rule;
3) The installation is not in the county or specific area that is regulated under the authority of that rule;
4) The installation does not contain the type of emission unit which is regulated by that rule;
5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Don Murphy
Environmental Engineer
Mr. David R. Zoghby  
EBV Explosive Environmental Company  
P.O. Box 1386  
Joplin, MO 64802

Re: EBV Explosive Environmental Company, 097-0138  
Permit Number: OP2013-063

Dear Mr. Zoghby:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Don Murphy at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS:dmk

Enclosures

c: Southwest Regional Office  
PAMS File: 2005-10-037