

Cynthia Lester

From: Moats, Nikki B <nikki.b.moats@wv.gov>
Sent: Wednesday, August 16, 2023 8:45 AM
To: Cynthia Lester
Subject: Re: Title V Permit status update

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One more question,

Can you scan and send me a pdf of the following for the Title V application form:

In Section 2 of the permit, update the active R13 permit to 25610 ✓

An Update for Section 3.0 of Title V Application form. Since there was a reduction in EtO emissions in Section 11.1.1, the EtO PTE likely has changed, so having the facility wide PTE updated and in our Application forms is necessary. ✓

In attachment E forms that were updated, the emission limits were updated, but the conditions referenced need to be updated to 25610 instead of M. ✓

Thanks,
Nikki

On Wed, Aug 16, 2023 at 8:06 AM Cynthia Lester <cynthia.lester1@covestro.com> wrote:

Good morning.

There are no changes to the PTE for Acrylic Acid, Propionaldehyde, Propylene Oxide, Styrene, or Xylene.

Cindi Lester, CSP

E&S Specialist



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| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|-------------------------|-----------------|----------------|
| V-7200 | None | Chiller | 2015* | N/A | N/A |

* The installation date for the EO Distribution emission units is for underlying NSR permit, but the equipment has not been installed as of the date of issuance of this renewal Title V operating permit.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|----------------------|-----------------------|
| R13-2561M | 10/15/2020 |
| R13-2561D | 06/14/2023 |

Section 2: Applicable Requirements

| 18. Applicable Requirements Summary | |
|--|---|
| Instructions: Mark all applicable requirements. | |
| <input type="checkbox"/> SIP | <input type="checkbox"/> FIP |
| <input checked="" type="checkbox"/> Minor source NSR (45CSR13) | <input type="checkbox"/> PSD (45CSR14) |
| <input type="checkbox"/> NESHAP (45CSR34) | <input type="checkbox"/> Nonattainment NSR (45CSR19) |
| <input checked="" type="checkbox"/> Section 111 NSPS | <input checked="" type="checkbox"/> Section 112(d) MACT standards |
| <input type="checkbox"/> Section 112(g) Case-by-case MACT | <input checked="" type="checkbox"/> 112(r) RMP |
| <input type="checkbox"/> Section 112(i) Early reduction of HAP | <input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e) |
| <input type="checkbox"/> Section 129 Standards/Reqts. | <input type="checkbox"/> Stratospheric ozone (Title VI) |
| <input type="checkbox"/> Tank vessel reqt., section 183(f) | <input type="checkbox"/> Emissions cap 45CSR§30-2.6.1 |
| <input type="checkbox"/> NAAQS, increments or visibility (temp. sources) | <input checked="" type="checkbox"/> 45CSR27 State enforceable only rule |
| <input checked="" type="checkbox"/> 45CSR4 State enforceable only rule | <input type="checkbox"/> Acid Rain (Title IV, 45CSR33) |
| <input type="checkbox"/> Emissions Trading and Banking (45CSR28) | <input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) |
| <input type="checkbox"/> Cross-State Air Pollution Rule (45CSR43) | |

| 19. Non Applicability Determinations |
|---|
| <p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>1. Standards of Performance for Volatile Organic Liquid Vessels - 40CFR60 (only tanks T-626 and T-632 must meet Kb) and 45CSR16.</p> <p>2. 40CFR63 Subpart G (National Emission Standards for HAPs) - since Subpart F is not applicable, Subpart G is not applicable. Facility does not manufacture as a primary product one or more of the chemicals listed in paragraphs (b)(1)(i) or (b)(1)(ii) of Subpart F.</p> <p>3. 40CFR63 Subpart EEEE (Organic Liquids Distribution - Non-Gasoline) - propylene oxide storage spheres are covered by the Polyether MACT.</p> <p>4. 40CFR63 Subpart FFFF (MON) - Polymer Polyols units are deemed a synthetic minor (R13-2561D) prior to the Subpart FFFF May 2008 compliance date.</p> <p>5. 40CFR63 Subpart VVVVVV (National Emission Standard for HAPs for Chemical Manufacturing Area Sources) - acetaldehyde (Table 1 HAP) is received as an impurity in propylene oxide and may under specific operating conditions be generated in the manufacturing process in low concentrations. Acetaldehyde is a noncarcinogen and is not present in the process fluid greater than 0.1%.</p> |
| <input checked="" type="checkbox"/> Permit Shield |

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Open burning - 45§6-3.1 and 6-3.2
Asbestos - 40CFR§61.145(b) and 45CSR15
Odor - 45CSR§4-3.1 (State enforceable only)
Standby plan for reducing emissions - 45CSR§11-5.2
Emission inventory - WV Code 22-5-4(a)(14)
Ozone-Depleting Substances 40CFR82, Subpart F
Risk Management Plan - 40CFR68
Particulate Matter Control - 45CSR§7-5.2
Facility Construction & Operation - 45CSR13, Permit No R13-25610
Prevent and Control Air pollution from Emission of VOCs - 45CSR21
Prevent and Control Air Pollution from Hazardous Waste TSD Facilities - 45CSR25
To Prevent and Control the Emissions of Toxic Air Pollutants - 45CSR27 (State enforceable only)
Emissions Standards for HAPs Pursuant to 40 CFR Part 63 - 40CFR63 (Flex Polyol Reactors are subject to PPP)
Protection of Stratospheric Ozone - 40CFR82
Standards of Performance for Volatile Organic Liquid Vessels - 40CFR60 (only tanks T-626 and T-632 must meet Kb) and 45CSR16.
To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations - 45CSR7

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring - 45CSR§21-46.1

Testing - WV Code §22-5-4(a)(15) and 45CSR13

Recordkeeping Requirements

- Monitoring Information - 45CSR§30-5.1.c2.A
- Retention of records - 45CSR§30-5.1c.2.B
- Odor - 45CSR§30-5.1.c (State enforceable only)

Reporting Requirements

- Responsible Official - 45CSR§30-4.4, 5.1.c.3.D and 5.1.c.3.E
- Certified Emissions Statement - 45CSR§30-8
- Compliance Certification - 45CSR§30-5.3.e
- Semi-annual Monitoring Reports - 45CSR§30-5.1.c.3.A
- Emergencies - Section 2.17 of Title V permit
- Deviations - 45CSR§30-5.1.c.3.B through D
- New applicable requirements - 45CSR§30-4.3.h.1.B

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

| 21. Active Permits/Consent Orders | | |
|-----------------------------------|--------------------------------|--|
| Permit or Consent Order Number | Date of Issuance MM/DD/YYYY | List any Permit Determinations that Affect the Permit (if any) |
| R13-26510 | 06/14/2023 | The construction and operation of the wastewater stripper (C2014) approved under R13-2561A, along with the approval of R13-2561C established Bayer's DC, WV facility as a synthetic minor source for HAPs, thus relieving the company of all the applicability requirements set forth by 40 CFR 63, Subpart FFFF (MON) |
| R30-03900102-2017 (MM02) | | Since R13-2561C established synthetic minor status before the MON's applicable compliance date of 01/01/2008, the requirements of 40 CFR 63 Subpart FFFF are no longer applicable. |
| R30-03900102-2017 | | |
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| 22. Inactive Permits/Obsolete Permit Conditions | | |
|---|--|-------------------------|
| Permit Number | Date of Issuance MM/DD/YYYY | Permit Condition Number |
| R13-749 | 07/16/1984 | |
| R1136 | 11/13/1990 | |
| R13-1182 A, B, C, D and E | 1/24/90, 1/8/99, 10/8/01, 4/22/02, 10/7/03 and 12/21/2004 | |
| R13-1400, R | 10/9/91 and 3/29/94 | |
| R13-1440 | 4/3/1992 | |
| R13-1524 | 9/22/1992 | |
| R13-1729, A and B | 6/21/94, 1/16/99 and 9/25/00 | |
| R13-1730, A and B | 6/21/94, 4/28/99 and 8/28/2003 | |
| R13-2083 | 3/21/1997 | |
| R13-2092 | 3/5/1997 | |
| R13-2429 | 6/11/2001 | |
| R13-2561 | 3/4/2004 | |
| R13-2561A | 12/16/2004 | |
| R13-2561B | 11/9/2006 | |
| R13-2561C | 4/9/2007 | |
| R13-2561D | 12/28/2007 | |
| R13-2561E | 4/18/2008 | |
| R13-2561F | 12/28/2009 | |
| R13-2561G | 9/16/2011 | |
| R13-2561H | 3/5/2012 | |
| R13-2561I | 7/19/2013 | |
| R13-2561J | 10/6/2014 | |
| R13-2561K | 8/19/2015 | |
| R30-03900102-2006 | 12/28/2006 | |
| R30-03900102-2006 (MM01) | 10/6/2008 | |

| 22. Inactive Permits/Obsolete Permit Conditions | | |
|---|-----------------------------|-------------------------|
| Permit Number | Date of Issuance MM/DD/YYYY | Permit Condition Number |
| R30-03900102-2006 (MM02) | 3/11/2009 | |
| R30-03900102-2012 | 6/11/2012 | |
| R30-03900102-2012 (MM01) | 9/9/2013 | |
| R30-03900102-2012 (MM02) | 12/5/2014 | |
| R30-03900102-2012 (MM03) | 12/22/2015 | |
| R30-03900102-2017 | 10/20/2017 | |
| R30-03900102-2017 (MM01) | 4/16/2019 | |
| R30-03900102-2017 (MM02) | 12/14/2020 | |
| CO-R27-92-22A(91) | 6/2/1992 | |
| CO-R27-98-36A(92) | 10/2/1998 | |
| CO-R21-97-37 | 12/17/1997 | |
| | | |
| R13-2561 L | 01/14/2019 | |
| R13-2561 M | 10/15/2020 | |
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Section 3: Facility-Wide Emissions

| 23. Facility-Wide Emissions Summary [Tons per Year] | |
|--|---------------------|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | 0.71 |
| Nitrogen Oxides (NO _x) | 6.51 |
| Lead (Pb) | 0 |
| Particulate Matter (PM _{2.5}) ¹ | 0 |
| Particulate Matter (PM ₁₀) ¹ | 0.03 |
| Total Particulate Matter (TSP) | 0 |
| Sulfur Dioxide (SO ₂) | 0 |
| Volatile Organic Compounds (VOC) | 124.0 |
| Hazardous Air Pollutants ² | Potential Emissions |
| Acetaldehyde | 1.2 |
| Acrylonitrile | 0.26 |
| Benzene | 0.01 |
| Ethylbenzene | 0.01 |
| Ethylene Oxide | 4.4 0.25 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| | |
| | |
| | |
| | |

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: B103 Reactor System (C-3101, C-3201 and C-3301) | Emission unit name: E-3101, E-3201, E-3301, E-3192, E-620 | List any control devices associated with this emission unit: Extended cook out (ECO) technology |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol Reactor System - B103, #1 and #2 Reaction Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
Variable - dependent upon product mix, materials and control technology requirements

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: Polyether Polyol - 37,500 Tons/year Polyether Polyol Starter - 5,000 Tons/year Impact reactor polyether Polyol - 90,000 Tons/year | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|---|---|
| Maximum design heat input and/or maximum horsepower rating: N/A | Type and Btu/hr rating of burners: |
|---|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-----------------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 84 | 1.94 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 70 | 1.53 |
| Ethylene Oxide | 44 4.0 | 0.25 0.065 |
| Propionaldehyde | 1.0 | 0.05 |
| Acetaldehyde | 1.0 | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer modeling and reactor sampling</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Subpart PPP (R13-2561M, 8.1.11)
R13-25610, 8.1.1
R13-25610, 8.1.2



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-25610, 8.2.1
R13-25610, 8.2.3
R13-25610, 8.4.3
R13-25610, 8.4.4
R13-25610, 8.4.6
R13-25610 8.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|---|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: C-5201, C-5301 and C-5401 (B196 Reactor Systems) | Emission unit name: E-636, E-637, E-638, E-5216 and E-5416 | List any control devices associated with this emission unit: Extended cook out (ECO) technology | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable) Flex Polyol reactor system – B196 Rx #7, #8 and #9 Reaction System | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 150,000 Tons per year | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-----------------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 163.6 | 1.71 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 139.5 | 1.4 |
| Ethylene Oxide | 24.0 8.4 | 0.25 0.065 |
| Propionaldehyde | 0.04 | 0.04 |
| Acetaldehyde | 0.01 | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer model and reactor sampling</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Subpart PPP (R13-2561M, 8.1.11)
R13-25610, 8.1.5
R13-25610, 8.1.6

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-25610, 8.2.1
R13-25610, 8.2.3
R13-25610, 8.4.3
R13-25610, 8.4.4
R13-25610, 8.4.6
R13-25610, 8.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|---|---|
| Control device ID number: C-2016 | List all emission units associated with this control device. Wastewater from PMPO Jet Pots (T-2148, T-2248, T-2348 and T-2448), Wastewater Stripper (C-2044) | |
| Manufacturer: | Model number: | Installation date: 1991 |
| Type of Air Pollution Control Device: | | |
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input checked="" type="checkbox"/> Other (describe) <input type="checkbox"/> Plug flow reactor |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator | |
| List the pollutants for which this device is intended to control and the capture and control efficiencies. | | |
| Pollutant | Capture Efficiency | Control Efficiency |
| Acrylonitrile | 100% | 99% |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). | | |
| Plug flow reactor that reacts sodium hydroxide with acrylonitrile. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| If Yes, Complete ATTACHMENT H | | |
| If No. Pre-controlled emissions are not considered a major source, as defined in 40CFR 64.2(a)(3). | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| <ul style="list-style-type: none"> • Wastewater feed rate • Caustic to wastewater feed ratio • Acrylonitrile treater feed temperature | | |

ATTACHMENT G - Air Pollution Control Device Form

| | | |
|--------------------------------------|---|----------------------------|
| Control device ID number: Y-2124 | List all emission units associated with this control device. PMPO#1 (H-2143, T-2148); PMPO#2 (H-2253, T-2248); PMPO#3 (H-2343, H-2353, T-2348); PMPO#4 (H-2443, T-2448, T-109); T-616, T-626, T-631, T-632, T-663, T-684, T-686, T-693, Switch Rack and Wastewater Stripper C-2044 | |
| Manufacturer: McGill Incorporated | Model number: Custom | Installation date: 1984 |

Type of Air Pollution Control Device:

| | | |
|---|--|---|
| <input type="checkbox"/> Bnglhouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input checked="" type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

| Pollutant | Capture Efficiency | Control Efficiency |
|------------------|--------------------|--------------------|
| Acrylonitrile | 100% | 99% |
| Benzene | 100% | 99% |
| Ethylene Benzene | 100% | 99% |
| Xylene | 100% | 99% |
| VOC's | 100% | 99% |
| | | |
| | | |
| | | |

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bngs, size, temperatures, etc.).

Incineration device that relies upon natural gas and waste gas feed to maintain destruction temperature. Minimum residence time is determined by inlet waste gas flow.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

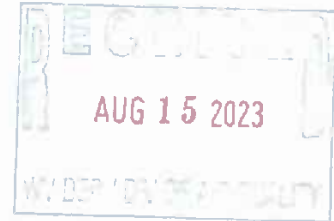
If No. Pre-controlled emissions are not considered a major source, as defined in 40 CFR 64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

- 1) Combustion chamber temperature
- 2) Flow rate of waste gas into the thermal oxidizer

ATTACHMENT G - Air Pollution Control Device Form

| | | |
|---|--|----------------------------------|
| Control device ID number: Ex-2424 and H-2443 | List all emission units associated with this control device. PMPO #4 | |
| Manufacturer: | Model number: | Installation date: N/A |
| Type of Air Pollution Control Device: <input type="checkbox"/> Baghouse/Fabric Filter <input type="checkbox"/> Venturi Scrubber <input type="checkbox"/> Multiclone <input type="checkbox"/> Carbon Bed Adsorber <input type="checkbox"/> Packed Tower Scrubber <input type="checkbox"/> Single Cyclone <input type="checkbox"/> Carbon Drum(s) <input type="checkbox"/> Other Wet Scrubber <input type="checkbox"/> Cyclone Bank <input type="checkbox"/> Catalytic Incinerator <input checked="" type="checkbox"/> Condenser <input type="checkbox"/> Settling Chamber <input type="checkbox"/> Thermal Incinerator <input type="checkbox"/> Flare <input type="checkbox"/> Other (describe) _____ <input type="checkbox"/> Wet Plate Electrostatic Precipitator <input type="checkbox"/> Dry Plate Electrostatic Precipitator | | |
| List the pollutants for which this device is intended to control and the capture and control efficiencies. | | |
| Pollutant | Capture Efficiency | Control Efficiency |
| Acrylonitrile | 100% | 98.5% |
| Styrene | 100% | 98.5% |
| VOC's | 100% | 90+% |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Water cooled condenser and inner and aftercooler condensers associated with the steam ejector system. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Complete ATTACHMENT H If No. These devices are considered inherent process equipment as defined in §64.1) which are not included in the regulation's definition of a control device; therefore, these devices are not applicable to CAM under §64.2(a)(2). | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. <ul style="list-style-type: none"> • Must vent to CTO when operating. This mode of operation only allowed when there is a period of malfunction or shutdown • No vinylidene chloride can be present • Jet condenser H-2443 exit vent temperature shall not exceed 150°C. • Total vent time is not to exceed 720 hours in a calendar year. | | |



Covestro LLC
501 Second Avenue
South Charleston, WV 25303

August 14, 2023

Hand-Delivered

Ms. Laura M. Crowder, Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SW
Charleston, WV 25304

Subject: ***45CSR30 Permit
Class I Administrative Update Request
Covestro LLC, South Charleston, WV
R30-03900102-2017***

Dear Ms. Crowder:

As a result of the recent changes to the NSR permit (R13-2561O), Covestro is requesting a revision to the Title V Permit (R30-03900102-2017) application that was originally submitted on April 1, 2022. Covestro's R13-2561O permit was approved and signed on June 14, 2023.

Based on the R13-2561O permit approval, the following revisions are being requested to the Title V Permit application:

- Attachment I – Emission Units Table – page 91
- Attachment J – Emission Points Data Summary Sheet – pages 92 – 95
 - *Attachments I and J are being updated to include:*
 - *C-3101/H-3192, C-3201/H-3192, C-3301/H-3316 (Reactors #1, #2 and #3 and Vacuum Systems respectively);*
 - *C-5201/H-5216/H-5416, C-5301/H-5216/H-5416, C-5401/H-5216/H-5416 (Reactors #7, #8 and #9 and Vacuum Systems respectively)*

- Attachment E – Emission Unit Forms
 - B103 Reactor System (C-3101, C-3201 and C-3301) – pages 426 – 428
 - B196 Reactor System (C-5201, C05301 and C-5401) – pages 648 – 650

Ethylene Oxide is a listed HAP in B103 Crude Storage Tanks and B196 Crude Storage tanks, but is reported as a VOC due to the percent EtO contained in these tanks being less than 5 percent by weight, pursuant to Subpart H of 40 C.F.R. § 63.180(d)(1).

- Attachment S – Title V Permit language revisions
 - Condition 8.1.2 – Table 8.1.2 – revise the Ethylene Oxide emissions:
 - Maximum (lb/hr) from 11 lb/hr to 4.0 lb/hr
 - Maximum (tons/yr) from 0.25 tons/yr to 0.065 tons/yr
 - Condition 8.1.6 – Table 8.1.6 – revise the Ethylene Oxide emissions:
 - Maximum (lb/hr) from 24.0 lb/hr to 8.6 lb/hr
 - Maximum (tons/yr) from 0.25 tons/yr to 0.065 tons/yr
 - Condition 11.11.1 – revise the Ethylene Oxide Annual Emissions from 0.71 TPY to 0.25 TPY
 - Remove Condition 12.0 EO Distribution System in its entirety.

If there are any questions regarding the requested permit revisions, please call me at (304) 746-8012 or email barbara.buck@covestro.com.

Sincerely,



Barbara J. Buck
Vice President and Plant Manager

Enclosures

AUG 15 2023

Attachment I
Emission Units Table
(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

| Emission Unit ID ¹ | Emission Point ID ² | Emission Unit Description | Year Installed/Modified | Design Capacity | Type ³ and Date of Change | Control Device ⁴ |
|-------------------------------|--------------------------------|---|-------------------------|--|--------------------------------------|-----------------------------|
| C-2090 | E-25 | Carbon treater (activation/de-activation) - vents to boiler | 2004 | 2,730 gal | Removal | B-25 |
| C-2090B | E-25 | Carbon treater (activation/de-activation) - vents to boiler | 2004 | 2,730 gal | Removal | B-25 |
| T-271 | E-271 | B103 Final Product Storage Tank | 1964/2021 | 30,000 gal | Modification | Atm vent |
| T-272 | E-272 | B103 Final Product Storage Tank | 1964/2021 | 30,000 gal | Modification | Atm vent |
| T-103 | E-103 | Polyol Starter or Crude Polyol | 1989/2019 | 37,859 gal | Modification | Atm vent |
| T-6797 | E-6797 | B103 Product Storage | 1979 | 50,207 gal | Modification | Atm vent |
| T-6799 | E-6799 | B103 Product Storage | 1979 | 50,207 gal | Modification | Atm vent |
| T-1522 | E-1522 | B103 Final Product Storage Tank | 1967/2020 | 54,000 gal | Modification | Atm vent |
| T-1526 | E-1526 | B103 Final Product Storage Tank | 1967 | 54,000 gal | Modification | Atm vent |
| C-3101/ H-3192 | E-3101/ E-3192 | Reactor #1 & Vacuum Systems | - | Polyester Polyols = 37,500 Tons/yr Polyester Polyol Starter = 5,000 Tons/yr Impact Reactor Polyester Polyols = 90,000 TPY | Mod | ECO |
| C-3201/ H-3192 | E-3201/ E-3192 | Reactor #2 & Vacuum Systems | - | | Mod | ECO |
| C-3301/ H-3316 | E-3301/ E-3301 | Reactor #3 & Vacuum Systems | - | | Mod | ECO |
| C-5261/ H-5216 | E-636/ E-5216 | Reactor #7 & Vacuum Systems | - | 150,000 Tons/yr | Modification | ECO |
| C-5301/ H-5216 | E-637/ E-5216 | Reactor #8 & Vacuum Systems | - | | Modification | ECO |
| C-5401/ H-5216 | E-633/ E-5216 | Reactor #9 & Vacuum Systems | - | | Modification | ECO |

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S, ... or other appropriate designation.
² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.
³ New, modification, removal
⁴ For Control Devices use the following numbering system: 1C, 2C, 3C, ... or other appropriate designation.

**Attachment J
EMISSION POINTS DATA SUMMARY SHEET**

| Table 1: Emissions Data | | | | | | | | | | | | | | | |
|--|----------------------------------|--|--------------|---|-------------|--|-------------|---|---|---|---|---|--|-------------------------------|---|
| Emission Point ID No. (Must match Emission Units Table & Plot Plan) | Emission Point Type ¹ | Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan) | | Air Pollution Control Device (Must match Emission Units Table & Plot Plan) | | Vent Time for Emission Unit (chemical processes only) | | All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS) | Maximum Potential Uncontrolled Emissions ⁴ | | Maximum Potential Controlled Emissions ⁵ | | Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor) | Est. Method Used ⁶ | Emission Concentration ⁷ (ppmv or mg/m ³) |
| | | ID No. | Source | ID No. | Device Type | Short Term ² | Max (hr/yr) | | lb/hr | ton/yr | lb/hr | ton/yr | | | |
| E-271 | Breather vent | T-271 | Storage tank | N/A | --- | C | C | VOCs | N/A | 0.01 | N/A | 0.005 | Gas | Tanks 4.0 | --- |
| E-272 | Breather vent | T-272 | Storage tank | N/A | --- | C | C | VOCs | N/A | 0.01 | N/A | 0.005 | Gas | Tanks 4.0 | |
| E-103 | Breather vent | T-103 | Storage tank | N/A | --- | C | C | 1. Propylene Oxide 2. Propionaldehyde 3. Acetaldehyde 4. VOCs | N/A | 1. 0.01 2. 0.002 3. 0.006 4. 0.005 | N/A | 1. 0.005 2. 0.001 3. 0.003 4. 0.0023 | Gas | Tanks 4.0 | |

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- ¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- ² Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).
- ³ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.
- ⁴ Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁶ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).
- ⁷ Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

| Table 1: Emissions Data | | | | | | | | | | | | | | | |
|--|----------------------------------|--|--------------|---|-------------|--|-------------|---|---|--------|---|--------|--|-------------------------------|---|
| Emission Point ID No. (Must match Emission Units Table & Plot Plan) | Emission Point Type ¹ | Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan) | | Air Pollution Control Device (Must match Emission Units Table & Plot Plan) | | Vent Time for Emission Unit (chemical processes only) | | All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS) | Maximum Potential Uncontrolled Emissions ⁴ | | Maximum Potential Controlled Emissions ⁵ | | Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor) | Est. Method Used ⁶ | Emission Concentration ⁷ (ppmv or mg/m ³) |
| | | ID No. | Source | ID No. | Device Type | Short Term ² | Max (hr/yr) | | lb/hr | ton/yr | lb/hr | ton/yr | | | |
| E-6797 | Breather vent | T-6797 | Storage tank | N/A | --- | C | C | VOCs | N/A | 0.01 | N/A | 0.005 | Gas | Tanks 4.0 | --- |
| E-6799 | Breather vent | T-6799 | Storage tank | N/A | --- | C | C | VOCs | N/A | 0.01 | N/A | 0.005 | Gas | Tanks 4.0 | --- |
| E-1522 | Breather vent | T-1522 | Storage tank | N/A | --- | C | C | VOCs | N/A | 0.01 | N/A | 0.005 | Gas | Tanks 4.0 | --- |

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- ¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- ² Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (i.e., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).
- ³ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.
- ⁴ Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁶ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).
- ⁷ Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

**Attachment J
EMISSION POINTS DATA SUMMARY SHEET**

Table 1: Emissions Data

| Emission Point ID No. (Must match Emission Units Table & Plot Plan) | Emission Point Type ¹ | Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan) | | Air Pollution Control Device (Must match Emission Units Table & Plot Plan) | | Vent Time for Emission Unit (chemical processes only) | | All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS) | Maximum Potential Uncontrolled Emissions ⁴ | | Maximum Potential Controlled Emissions ⁵ | | Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor) | Est. Method Used ⁶ | Emission Concentration ⁷ (ppmv or mg/m ³) |
|---|----------------------------------|--|--------------|---|-------------|--|-------------|---|---|--------|---|--------|--|-------------------------------|---|
| | | ID No. | Source | ID No. | Device Type | Short Term ² | Max (hr/yr) | | lb/hr | ton/yr | lb/hr | ton/yr | | | |
| E-1526 | Breather vent | T-1526 | Storage tank | N/A | — | C | C | VOCs | N/A | 0.01 | N/A | 0.005 | Gas | Tanks 4.0 | |
| E-6101/E-3142 E-3201/E-3142 E-6201/E-3301 | ECO | C-3101 C-3201 C-3301 | Reactors | N/A | — | C | C | E+O | N/A | N/A | 4.0 | 0.065 | Gas | Eng. Calc. | |
| E-6361/E-5216 E-5416 E-6371/E-5216 E-5416 E-6381/E-5216 E-5416 | ECO | C-5201 C-5301 C-5401 | Reactors | N/A | — | C | C | E+O | N/A | N/A | 8.6 | 0.065 | Gas | Eng. Calc. | |

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- ¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- ² Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (i.e., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/week).
- ³ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.
- ⁴ Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁶ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).
- ⁷ Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

**Attachment J
EMISSION POINTS DATA SUMMARY SHEET**

Table 2: Release Parameter Data

| Emission Point ID No. <i>(Must match Emission Units Table)</i> | Inner Diameter (ft.) | Exit Gas | | | Emission Point Elevation (ft) | | UTM Coordinates (km) | |
|---|----------------------|------------|---|--------------------|--|--|------------------------|-------------------------|
| | | Temp. (°F) | Volumetric Flow ¹ (acfm) <i>at operating conditions</i> | Velocity (fps) | Ground Level <i>(Height above mean sea level)</i> | Stack Height ² <i>(Release height of emissions above ground level)</i> | Northing | Easting |
| E-3101/ E-3201/ E-3301 | | Ambient | 47-145 (varies) | 16-27 (varies) | ~600ft | 40ft | 38.371594 ^o | -81.687515 ^o |
| E-636/E-637/ E-638 | | Ambient | 150-300 (varies) | 28-100 (varies) | ~600ft | 40ft | 38.370089 ^o | -81.683601 ^o |
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| | | | | | | | | |

¹ Give at operating conditions. Include inerts.
² Release height of emissions above ground level.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: B103 Reactor System (C-3101, C-3201 and C-3301) | Emission unit name: E-3101, E-3201, E-3301, E-3192, E-620 | List any control devices associated with this emission unit: Extended cook out (ECO) technology |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol Reactor System - B103, #1 and #2 Reaction Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable - dependent upon product mix, materials and control technology requirements

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: <small>Polyether Polyol - 37,500 Tons/year Polyether Polyol Starter - 5,000 Tons/year Impact reactor polyether Polyol - 90,000 Tons/year</small> | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: N/A | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 84 | 1.94 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 70 | 1.53 |
| Ethylene Oxide | 44 + 4.0 | 0.25 + 0.065 |
| Propionaldehyde | 1.0 | 0.05 |
| Acetaldehyde | 1.0 | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer modeling and reactor sampling</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Subpart PPP (R13-2561M, 8.1.11)
R13-2561M, 8.1.1
R13-2561M, 8.1.2



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 8.2.1
R13-2561M, 8.2.3
R13-2561M, 8.4.3
R13-2561M, 8.4.4
R13-2561M, 8.4.6
R13-2561M, 8.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: C-5201, C-5301 and C-5401 (B196 Reactor Systems) | Emission unit name: E-636, E-637, E-638, E-5216 and E-5416 | List any control devices associated with this emission unit: Extended cook out (ECO) technology |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol reactor system – B196 Rx #7, #8 and #9 Reaction System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 150,000 Tons per year | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-----------------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 163.6 | 1.71 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 139.5 | 1.4 |
| Ethylene Oxide | 24.0 8.6 | 0.25 0.063 |
| Propionaldehyde | 0.04 | 0.04 |
| Acetaldehyde | 0.01 | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer model and reactor sampling</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Subpart PPP (R13-2561M, 8.1.11)
R13-2561M, 8.1.5
R13-2561M, 8.1.6



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 8.2.1
R13-2561M, 8.2.3
R13-2561M, 8.4.3
R13-2561M, 8.4.4
R13-2561M, 8.4.6
R13-2561M, 8.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

Attachments - Title V Permit Language Revisions

8.0 Flexible Polyols Production, Emission Groups [(#1 and #2 Feed System, Reactor, Interim Storage), (#3 Feed System, Reactor, Interim Storage & Ancillary), (#1, #2 and #5 IX Refining Systems), (B103 Final Product Storage Tanks), (#7, #8, and #9 Feed System, Reactors, and Interim Storage), (#7, #8, #9 and #10 IX and Refining System), (B196 Final Storage Tanks), (Distillation Column), and (PO Distribution System)]

8.1. Limitations and Standards

8.1.1. Annual production rates from the B103 Flexible Polymer Polyols Production Units, including Reactor Systems #1, #2, and #3 shall not exceed the following production rates:

- a. Polyether Polyol - 37,500 tons per year
- b. Polyether Polyol Starter - 5,000 tons per year
- c. Impact Polyether Polyol - 90,000 tons per year

[45CSR13 - R13-2561, Condition 8.1.1]

8.1.2. The B103 Reactor Systems shall be limited to the total maximum combined emissions and associated rates set forth in Table 8.1.2. of this permit.

Table 8.1.2.

| Equipment Identification | Emission Point ID | Chemical | Maximum (lb/hr) | Maximum (tons/yr) |
|--|-------------------|---|--------------------|-----------------------|
| Reactor #1 & Vacuum Systems C-3101 H-3192 | E-3101 E-3192 | Propylene Oxide Ethylene Oxide Propionaldehyde Acetaldehyde VOC | 70 | 1.53 |
| Reactor #2 & Vacuum Systems C-3201 H-3192 | E-3201 E-3192 | | 4.0 4.0 | 0.25 0.005 |
| Reactor #3 & Vacuum Systems C-3301 H-3316 | E-620 E-3301 | | 1.0 1.0 84.0 | 0.05 0.01 1.94 |

[45CSR13 - R13-2561, Condition 8.1.2]

8.1.6. The B196 Reactor Systems shall be limited to the total maximum combined emissions and associated rates set forth in Table 8.1.6. of this permit.

Table 8.1.6.

| Equipment Identification | Emission Point ID | Chemical | Maximum (lb/hr) | Maximum (tons/yr) |
|---|---------------------------|---|-----------------------|-----------------------|
| Reactor #7 & Vacuum Systems C-5201 H-5216 H-5416 | E-636 E-5216 E-5416 | Propylene Oxide Ethylene Oxide Propionaldehyde Acetaldehyde VOC | 139.5 | 1.4 |
| Reactor #8 & Vacuum Systems C-5301 H-5216 H-5416 | E-637 E-5216 E-5416 | | 24.0 8.6 | 0.25 0.065 |
| Reactor #9 & Vacuum Systems C-5401 H-5216 H-5416 | E-638 E-5216 E-5416 | | 0.04 0.01 163.6 | 0.04 0.01 1.71 |

[45CSR13 - R13-2561, Condition 8.1.6]

8.1.7. The B196 Refining System shall be operated within the process parameters set forth in Table 8.1.7. of this permit.

Table 8.1.7.

| Equipment ID | Maximum ISOP Flush Rate (pounds/hour) | Total Maximum Product Feed Rate (pounds/hour) | Total Maximum Vent Time ¹ (hours) |
|--------------|---------------------------------------|---|--|
| C-5504 | 80,000 | 60,000 | 2,804 |
| C-5604 | | | |
| C-5704 | | | |
| C-5804 | | | |

1 - Vent time considered only when system contains VOCs.

[45CSR13 - R13-2561, Condition 8.1.7]

11.0 Synthetic Minor Status as a Major HAP Source

11.1 Limitations and Standards

- 11.1.1. Facility-wide HAP emissions shall be limited to the pollutants and associated annual emission rates as shown in Table 11.1.1.

Table 11.1.1.

| Pollutant | Annual Emissions ¹ (TPY) |
|-----------------|--|
| Acetaldehyde | 0.62 |
| Acrylic Acid | 0.01 |
| Acrylonitrile | 0.43 |
| Benzene | 0.02 |
| Ethylbenzene | 0.02 |
| Ethylene Oxide | 0.71 0.25 |
| Propionaldehyde | 0.94 |
| Propylene Oxide | 3.65 |
| Styrene | 1.68 |
| Xylene | 0.02 |

¹ - Annual emission limits shall be based on a 12-month rolling total.

[45CSR13 - R13-2561, Condition 11.1.1.]

- 11.1.2. Total facility-wide HAP emissions, including all point source and fugitive emissions, shall be limited to a maximum annual emission rate of 8.83 tons per year.

[45CSR13 - R13-2561, Condition 11.1.2.]

- 11.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment and associated monitoring equipment listed in Section 1.0 and affected by Section 11.0 of this permit in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - R13-2561, Condition 11.1.3.]

11.2 Monitoring Requirements

- 11.2.1. Reserved.

11.3 Testing Requirements

- 11.3.1. Reserved.

12.0 EO Distribution System — Remove entire section

12.1. Limitations and Standards

- 12.1.1. The amount of Ethylene Oxide delivered to the tank (C-7000) shall not exceed 7,389,474 gallons per year based on a rolling twelve month total.
[45CSR13 - R13-2561, Condition 12.1.1.]
- 12.1.2. A scrubber shall be used to reduce EO emissions from the two EO Reaction Tanks (D-7102 and D-7103) and from the purging of the system. Said scrubber shall be designed, constructed, operated, and maintained so as to achieve a minimum 98% reduction in EO emissions.
[45CSR13 - R13-2561, Condition 12.1.2.]
- 12.1.3. The permittee shall reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.
[45CSR13 - R13-2561, Condition 12.1.3.; 40 C.F.R. §63.1425(b)(2)(ii); 45CSR34]
- 12.1.4. The pH of the scrubbing liquor shall be maintained at 1.0 or lower.
[45CSR13 - R13-2561, Condition 12.1.4.]

12.2. Monitoring Requirements

- 12.2.1. In order to determine compliance with 12.1.1 of this permit, the permittee shall monitor the throughput of Ethylene Oxide to tank C-7000 on at least a monthly basis.
[45CSR13 - R13-2561, Condition 12.2.1.]
- 12.2.2. The permittee shall monitor and continuously record the flow rate of the scrubbing liquid. Additionally, the pH of the scrubbing liquid effluent shall be either monitored and recorded continuously or sampled and tested at least once per day.
[45CSR13 - R13-2561, Condition 12.2.2.; 40 C.F.R. §63.1429(a)(4); 45CSR34]

12.3. Testing Requirements

- 12.3.1. In order to determine compliance with 12.1.2 and 12.1.3 of this permit, the permittee shall conduct a performance test using the applicable procedures in paragraphs (c)(1) through (4) of section §63.1426.
[45CSR13 - R13-2561, Condition 12.3.1.; 40 C.F.R. §63.1426(e); 45CSR34]

12.4. Recordkeeping Requirements

- 12.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-2561, Condition 12.4.1.]

12.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 and affected by Section 12.0 of this permit, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - R13-2561, Condition 12.4.2.]

12.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 and affected by Section 12.0 of this permit, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - R13-2561, Condition 12.4.3.]

12.4.4. The permittee shall maintain records of the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in the process vent requirements in 40 C.F.R. §63.1426.

[45CSR13 - R13-2561, Condition 12.4.4.; 40 C.F.R. §63.1430(b)(2)(i); 45CSR34]

12.4.5. For each parameter monitored according to the process vent monitoring requirements in 40 C.F.R. §63.1429(a) and Table 5 of 40 C.F.R. 63 Subpart PPP, or for alternate parameters and/or parameters for alternate control techniques monitored according to the alternative parameter monitoring reporting requirements in 40 C.F.R. §63.1439(f) as allowed under 40 C.F.R. §63.1429(b), the permittee shall maintain documentation showing the establishment of the level that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart, as required by the process vent monitoring requirements in 40 C.F.R. §63.1429(d).

[45CSR13 - R13-2561, Condition 12.4.5.; 40 C.F.R. §63.1430(c); 45CSR34]

12.5. Reporting Requirements

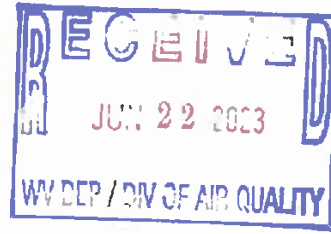
- 12.5.1. When sampling of the pH is performed in accordance with 12.2.2 of this permit, the permittee shall report all values that are above 1.0 pH and all instances when monitoring data is not collected.

This information shall be reported in the next semi-annual monitoring report in accordance with condition 3.5.6.

[45CSR13 - R13-2561, Condition 12.5.1.; 45CSR§30-5.1.c.]

12.6. Compliance Plan

- 12.6.1. Reserved.



Covestro LLC
501 Second Avenue
South Charleston, WV 25303

June 21, 2023

Hand-Delivered

Ms. Laura M. Crowder, Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SW
Charleston, WV 25304

Subject: **45CSR30 Permit**
Class I Administrative Update Request
Covestro LLC, South Charleston, WV
R30-03900102-2017

Dear Ms. Crowder:

As a result of the recent changes to the NSR permit (R13-2561O), Covestro is requesting a revision to the Title V Permit (R30-03900102-2017) application that was originally submitted on April 1, 2022. Covestro's R13-2561O permit was approved and signed on June 14, 2023.

Based on the R13-2561O permit approval, the following revisions are being requested to the Title V Permit application:

- Condition 8.1.2 – Table 8.1.2 – revise the Ethylene Oxide emissions:
 - Maximum (lb/hr) from 11 lb/hr to 4.0 lb/hr
 - Maximum (tons/yr) from 0.25 tons/yr to 0.065 tons/yr
- Condition 8.1.6 – Table 8.1.6 – revise the Ethylene Oxide emissions:
 - Maximum (lb/hr) from 24.0 lb/hr to 8.6 lb/hr
 - Maximum (tons/yr) from 0.25 tons/yr to 0.065 tons/yr
- Condition 11.11.1 – revise the Ethylene Oxide Annual Emissions from 0.71 TPY to 0.25 TPY
- Remove Condition 12.0 EO Distribution System in its entirety.

Suggested permit language revisions is included as attachments to this request.

45CSR30 Permit Update Letter
June 21, 2023
Page 2

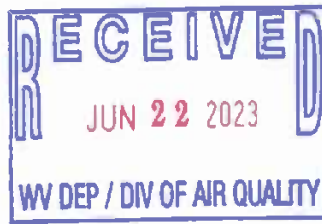
If there are any questions regarding the requested permit revisions, please call me at (304) 746-8012 or email barbara.buck@covestro.com.

Sincerely,

Barbara J. Buck
Vice President and Plant Manager

A handwritten signature in blue ink that reads "Barbara J. Buck". The signature is written in a cursive style with a large, stylized initial 'B'.

Enclosures



8.0 Flexible Polyols Production, Emission Groups [(#1 and #2 Feed System, Reactor, Interim Storage), (#3 Feed System, Reactor, Interim Storage & Ancillary), (#1, #2 and #5 IX Refining Systems), (B103 Final Product Storage Tanks), (#7, #8, and #9 Feed System, Reactors, and Interim Storage), (#7, #8, #9 and #10 IX and Refining System), (B196 Final Storage Tanks), (Distillation Column), and (PO Distribution System)]

8.1. Limitations and Standards

8.1.1. Annual production rates from the B103 Flexible Polymer Polyols Production Units, including Reactor Systems #1, #2, and #3 shall not exceed the following production rates:

- a. Polyether Polyol - 37,500 tons per year
- b. Polyether Polyol Starter - 5,000 tons per year
- c. Impact Polyether Polyol - 90,000 tons per year

[45CSR13 - R13-2561, Condition 8.1.1]

8.1.2. The B103 Reactor Systems shall be limited to the total maximum combined emissions and associated rates set forth in Table 8.1.2. of this permit.

Table 8.1.2.

| Equipment Identification | Emission Point ID | Chemical | Maximum (lb/hr) | Maximum (tons/yr) |
|---|-------------------|---|--------------------|-----------------------|
| Reactor #1 & Vacuum Systems C-3101 H-3192 | E-3101 E-3192 | Propylene Oxide Ethylene Oxide Propionaldehyde Acetaldehyde VOC | 70 | 1.53 |
| Reactor #2 & Vacuum Systems C-3201 H-3192 | E-3201 E-3192 | | 11 4.0 | 0.25 0.065 |
| Reactor #3 & Vacuum Systems C-3301 H-3316 | E-620 E-3301 | | 1.0 1.0 84.0 | 0.05 0.01 1.94 |

[45CSR13 - R13-2561, Condition 8.1.2]

Pg 3 of 8

8.1.6. The B196 Reactor Systems shall be limited to the total maximum combined emissions and associated rates set forth in Table 8.1.6. of this permit.

Table 8.1.6.

| Equipment Identification | Emission Point ID | Chemical | Maximum (lb/hr) | Maximum (tons/yr) |
|---|---------------------------|---|---|--|
| Reactor #7 & Vacuum Systems C-5201 H-5216 H-5416 | E-636 E-5216 E-5416 | | | |
| Reactor #8 & Vacuum Systems C-5301 H-5216 H-5416 | E-637 E-5216 E-5416 | Propylene Oxide Ethylene Oxide Propionaldehyde Acetaldehyde VOC | 139.5 24.0 8.6 0.04 0.01 163.6 | 1.4 0.25 0.065 0.04 0.01 1.71 |
| Reactor #9 & Vacuum Systems C-5401 H-5216 H-5416 | E-638 E-5216 E-5416 | | | |

[45CSR13 - R13-2561, Condition 8.1.6]

8.1.7. The B196 Refining System shall be operated within the process parameters set forth in Table 8.1.7. of this permit.

Table 8.1.7.

| Equipment ID | Maximum ISOP Flush Rate (pounds/hour) | Total Maximum Product Feed Rate (pounds/hour) | Total Maximum Vent Time ¹ (hours) |
|--------------|---------------------------------------|---|--|
| C-5504 | 80,000 | 60,000 | 2,804 |
| C-5604 | | | |
| C-5704 | | | |
| C-5804 | | | |

1 - Vent time considered only when system contains VOCs.

[45CSR13 - R13-2561, Condition 8.1.7]

11.0 Synthetic Minor Status as a Major HAP Source

11.1 Limitations and Standards

- 11.1.1. Facility-wide HAP emissions shall be limited to the pollutants and associated annual emission rates as shown in Table 11.1.1.

Table 11.1.1.

| Pollutant | Annual Emissions ¹ (TPY) |
|-----------------|--|
| Acetaldehyde | 0.62 |
| Acrylic Acid | 0.01 |
| Acrylonitrile | 0.43 |
| Benzene | 0.02 |
| Ethylbenzene | 0.02 |
| Ethylene Oxide | 0.71 0.25 |
| Propionaldehyde | 0.94 |
| Propylene Oxide | 3.65 |
| Styrene | 1.68 |
| Xylene | 0.02 |

¹ - Annual emission limits shall be based on a 12-month rolling total.

[45CSR13 - R13-2561, Condition 11.1.1.]

- 11.1.2. Total facility-wide HAP emissions, including all point source and fugitive emissions, shall be limited to a maximum annual emission rate of 8.83 tons per year.

[45CSR13 - R13-2561, Condition 11.1.2.]

- 11.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment and associated monitoring equipment listed in Section 1.0 and affected by Section 11.0 of this permit in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - R13-2561, Condition 11.1.3.]

11.2 Monitoring Requirements

- 11.2.1. Reserved.

11.3 Testing Requirements

- 11.3.1. Reserved.

12.0 EO Distribution System

Remove Condition 12.0

12.1. Limitations and Standards

- 12.1.1. The amount of Ethylene Oxide delivered to the tank (C-7000) shall not exceed 7,389,474 gallons per year based on a rolling twelve month total.
[45CSR13 - R13-2561, Condition 12.1.1.]
- 12.1.2. A scrubber shall be used to reduce EO emissions from the two EO Reaction Tanks (D-7102 and D-7103) and from the purging of the system. Said scrubber shall be designed, constructed, operated, and maintained so as to achieve a minimum 98% reduction in EO emissions.
[45CSR13 - R13-2561, Condition 12.1.2.]
- 12.1.3. The permittee shall reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.
[45CSR13 - R13-2561, Condition 12.1.3.; 40 C.F.R. §63.1425(b)(2)(ii); 45CSR34]
- 12.1.4. The pH of the scrubbing liquor shall be maintained at 1.0 or lower.
[45CSR13 - R13-2561, Condition 12.1.4.]

12.2. Monitoring Requirements

- 12.2.1. In order to determine compliance with 12.1.1 of this permit, the permittee shall monitor the throughput of Ethylene Oxide to tank C-7000 on at least a monthly basis.
[45CSR13 - R13-2561, Condition 12.2.1.]
- 12.2.2. The permittee shall monitor and continuously record the flow rate of the scrubbing liquid. Additionally, the pH of the scrubbing liquid effluent shall be either monitored and recorded continuously or sampled and tested at least once per day.
[45CSR13 - R13-2561, Condition 12.2.2.; 40 C.F.R. §63.1429(a)(4); 45CSR34]

12.3. Testing Requirements

- 12.3.1. In order to determine compliance with 12.1.2 and 12.1.3 of this permit, the permittee shall conduct a performance test using the applicable procedures in paragraphs (c)(1) through (4) of section §63.1426.
[45CSR13 - R13-2561, Condition 12.3.1.; 40 C.F.R. §63.1426(e); 45CSR34]

12.4. Recordkeeping Requirements

- 12.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 - R13-2561, Condition 12.4.1.]

12.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 and affected by Section 12.0 of this permit, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - R13-2561, Condition 12.4.2.]

12.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 and affected by Section 12.0 of this permit, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - R13-2561, Condition 12.4.3.]

12.4.4. The permittee shall maintain records of the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in the process vent requirements in 40 C.F.R. §63.1426.

[45CSR13 - R13-2561, Condition 12.4.4.; 40 C.F.R. §63.1430(b)(2)(i); 45CSR34]

12.4.5. For each parameter monitored according to the process vent monitoring requirements in 40 C.F.R. §63.1429(a) and Table 5 of 40 C.F.R. 63 Subpart PPP, or for alternate parameters and/or parameters for alternate control techniques monitored according to the alternative parameter monitoring reporting requirements in 40 C.F.R. §63.1439(f) as allowed under 40 C.F.R. §63.1429(b), the permittee shall maintain documentation showing the establishment of the level that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart, as required by the process vent monitoring requirements in 40 C.F.R. §63.1429(d).

[45CSR13 - R13-2561, Condition 12.4.5.; 40 C.F.R. §63.1430(c); 45CSR34]

12.5. Reporting Requirements

- 12.5.1. When sampling of the pH is performed in accordance with 12.2.2 of this permit, the permittee shall report all values that are above 1.0 pH and all instances when monitoring data is not collected.

This information shall be reported in the next semi-annual monitoring report in accordance with condition 3.5.6.

[45CSR13 - R13-2561, Condition 12.5.1.; 45CSR§30-5.1.c.]

12.6. Compliance Plan

- 12.6.1. Reserved.

Received
April 1, 2022
WV DEP/Div of Air Quality

Division of Air Quality Permit Application Submittal

Please find attached a permit application for :
[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

- Type of NSR Application (check all that apply):
 - Construction
 - Modification
 - Class I Administrative Update
 - Class II Administrative Update
 - Relocation
 - Temporary
 - Permit Determination
- Type of 45CSR30 (TITLE V) Application:
 - Title V Initial
 - Title V Renewal
 - Administrative Amendment**
 - Minor Modification**
 - Significant Modification**
 - Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

- Payment Type:
 - Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
 - Check (Make checks payable to: WVDEP – Division of Air Quality)
Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these Identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):
 - Responsible Official/Authorized Representative
 - Name:
 - Email:
 - Phone Number:
 - Company Contact
 - Name:
 - Email:
 - Phone Number:
 - Consultant
 - Name:
 - Email:
 - Phone Number:

Covestro LLC
South Charleston Manufacturing Facility
Title V Permit Application (2022)
R30-03900102-2017

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| • Attachment E – Emission Unit Forms | Page 68 – 766 |
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| o Flexible Polyols (B196/Phase IV) | |
| o PO Distribution | |
| o EO Distribution (N/A – Equipment not installed) | |
| • Attachment F – Schedule of Compliance Forms | <i>Not Required</i> |
| • Attachment G – Air Pollution Control Devices | Page 767 – 773 |
| • Attachment H – Compliance Assurance Monitoring (CAM) Forms | <i>Not Required</i> |



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL
PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE

Charleston, WV 25304

Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

| | |
|--|---|
| 1. Name of Applicant (As registered with the WV Secretary of State's Office): Covestro LLC | 2. Facility Name or Location: South Charleston Manufacturing |
| 3. DAQ Plant ID No.: 039-00102 | 4. Federal Employer ID No. (FEIN): 061653740 |
| 5. Permit Application Type: <input type="checkbox"/> Initial Permit When did operations commence? <input checked="" type="checkbox"/> Permit Renewal What is the expiration date of the existing permit? <input type="checkbox"/> Update to Initial/Renewal Permit Application | |
| 6. Type of Business Entity: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Governmental Agency <input type="checkbox"/> LLC <input type="checkbox"/> Partnership <input type="checkbox"/> Limited Partnership | 7. Is the Applicant the: <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both If the Applicant is not both the owner and operator, please provide the name and address of the other party. |
| 8. Number of onsite employees: Approx. 110 | |
| 9. Governmental Code: <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> District government owned and operated; 5 | |
| 10. Business Confidentiality Claims Does this application include confidential information (per 45CSR31)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance. | |

| | | |
|--|--------------------------|---------------|
| 11. Mailing Address | | |
| Street or P.O. Box: 501 Second Avenue | | |
| City: South Charleston | State: WV | Zip: 25303 |
| Telephone Number: 304-746-8000 | Fax Number: 304-746-8138 | |

| | | |
|--|---|---|
| 12. Facility Location (Physical Address) | | |
| Street: 437 MacCorkle Avenue | City: South Charleston | County: Kanawha |
| UTM Easting: 439.65 km | UTM Northing: 4247.00 km | Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18 |
| Directions: From the DAQ offices, turn left onto MacCorkle Avenue/WV-61. Turn slight right onto MacCorkle Avenue/WV-60. Plant is on the right. | | |
| Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, for what air pollutants? | |
| Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>call</i> | If yes, name the affected state(s). Ohio, Kentucky | |
| Is facility located within 100 km of a Class I Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, name the area(s). | |
| If no, do emissions impact a Class I Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| <small>¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.</small> | | |

*call
1/22/2025*

| | | |
|--|--------------------------|---------------|
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| Directions: From the DAQ offices, turn left onto MacCorkle Avenue/WV-61. Turn slight right onto MacCorkle Avenue/WV-60. Plant is on the right. | | |
| Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, for what air pollutants? | |
| Is facility located within 50 miles of another state? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, name the affected state(s). | |
| Is facility located within 100 km of a Class I Area!? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, name the area(s). | |
| If no, do emissions impact a Class I Area!? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| <small>¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.</small> | | |

| | | |
|--|-------------------------------------|--|
| 13. Contact Information | | |
| Responsible Official: Barbara J. Buck | | Title: Vice President & Site Manager |
| Street or P.O. Box: 501 Second Avenue | | |
| City: South Charleston | State: WV | Zip: 25303 |
| Telephone Number: 304-746-8012 | Cell Number: 304-550-2742 | |
| E-mail address: barbara.buck@covestro.com | | |
| Environmental Contact: Cynthia D. Lester | | Title: Environ. Specialist |
| Street or P.O. Box: 501 Second Avenue | | |
| City: South Charleston | State: WV | Zip: 25303 |
| Telephone Number: 304-746-8046 | Cell Number: 304-410-6416 | |
| E-mail address: cynthia.lester1@covestro.com | | |
| Application Preparer: Cynthia D. Lester | | Title: Environ. Specialist |
| Company: Covestro LLC | | |
| Street or P.O. Box: 501 Second Avenue | | |
| City: South Charleston | State: WV | Zip: 25303 |
| Telephone Number: 304-746-8046 | Cell Number: 304-410-6416 | |
| E-mail address: cynthia.lester1@covestro.com | | |

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

| Process | Products | NAICS | SIC |
|-----------------|-------------------|--------|------|
| Flex Polyols | Polyether Polyols | 325199 | 2869 |
| Polymer Polyols | Polyether Polyols | 325199 | 2869 |
| | | | |
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Provide a general description of operations.

The Flex Polyol units (B103 and B196) are chemical manufacturing process for the production of Polyether Polyols. Polyether Polyols are compounds that are formed through the polymerization of ethylene oxide (EO) or propylene oxide (PO) with compounds that have at least one reactive hydrogen. Polyether Polyols are either used as raw materials for the Polymer manufacturing units at South Charleston or sold for use in urethane applications. Many different Polyether products are made by changing reactive hydrogen compound, varying the amount of PO or EO, and changing or adjusting the catalyst.

The major raw materials (PO and EO) are received from common facility systems. Most of the other raw materials and ancillary equipment are dedicated to the unit. The reactors are operated in a semi-batch mode and the refining steps are operated in a continuous mode. One reactor system does not utilize a refining step and utilizes a different reaction catalyst.

The Flex Polyol process is broken down into four areas: Feed system, reaction system, intermediate storage and refining system.

The Polymer Polyols units are chemical manufacturing processes for the production of polymer polyols. Polymer Polyols are colloidal dispersions of small polymer particles in polyether polyols. The polymer particles are composed of acrylonitrile and styrene. Polymer Polyols are used in the manufacture of polyurethanes. Many different Polymer Polyol products are manufactured depending upon the final customer application. The different products are made by modifying the Flex Polyol, use of Preformed Stabilizer and/or varying copolymer charge amounts.

The Polymer Polyol process is broken down into four areas: Feed system, reaction system, evaporation system and production filtration system. This is a continuous manufacturing system.

- 15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.
- 16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."
- 17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

| 18. Applicable Requirements Summary | |
|--|---|
| Instructions: Mark all applicable requirements. | |
| <input type="checkbox"/> SIP | <input type="checkbox"/> FIP |
| <input checked="" type="checkbox"/> Minor source NSR (45CSR13) | <input type="checkbox"/> PSD (45CSR14) |
| <input type="checkbox"/> NESHAP (45CSR34) | <input type="checkbox"/> Nonattainment NSR (45CSR19) |
| <input checked="" type="checkbox"/> Section 111 NSPS | <input checked="" type="checkbox"/> Section 112(d) MACT standards |
| <input type="checkbox"/> Section 112(g) Case-by-case MACT | <input checked="" type="checkbox"/> 112(r) RMP |
| <input type="checkbox"/> Section 112(i) Early reduction of HAP | <input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e) |
| <input type="checkbox"/> Section 129 Standards/Reqts. | <input type="checkbox"/> Stratospheric ozone (Title VI) |
| <input type="checkbox"/> Tank vessel reqt., section 183(f) | <input type="checkbox"/> Emissions cap 45CSR§30-2.6.1 |
| <input type="checkbox"/> NAAQS, increments or visibility (temp. sources) | <input checked="" type="checkbox"/> 45CSR27 State enforceable only rule |
| <input checked="" type="checkbox"/> 45CSR4 State enforceable only rule | <input type="checkbox"/> Acid Rain (Title IV, 45CSR33) |
| <input type="checkbox"/> Emissions Trading and Banking (45CSR28) | <input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) |
| <input type="checkbox"/> Cross-State Air Pollution Rule (45CSR43) | |

| 19. Non Applicability Determinations |
|---|
| <p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>1. Standards of Performance for Volatile Organic Liquid Vessels - 40CFR60 (only tanks T-626 and T-632 must meet Kb) and 45CSR16.</p> <p>2. 40CFR63 Subpart G (National Emission Standards for HAPs) - since Subpart F is not applicable, Subpart G is not applicable. Facility does not manufacture as a primary product one or more of the chemicals listed in paragraphs (b)(1)(i) or (b)(1)(ii) of Subpart F.</p> <p>3. 40CFR63 Subpart EEEE (Organic Liquids Distribution - Non-Gasoline) - propylene oxide storage spheres are covered by the Polyether MACT.</p> <p>4. 40CFR63 Subpart FFFF (MON) - Polymer Polyols units are deemed a synthetic minor (R13-2561M) prior to the Subpart FFFF May 2008 compliance date.</p> <p>5. 40CFR63 Subpart VVVVVV (National Emission Standard for HAPs for Chemical Manufacturing Area Sources) - acetaldehyde (Table 1 HAP) is received as an impurity in propylene oxide and may under specific operating conditions be generated in the manufacturing process in low concentrations. Acetaldehyde is a noncarcinogen and is not present in the process fluid greater than 0.1%.</p> |
| <p><input checked="" type="checkbox"/> Permit Shield</p> |

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Open burning - 45§6-3.1 and 6-3.2
Asbestos - 40CFR§61.145(b) and 45CSR15
Odor - 45CSR§4-3.1 (State enforceable only)
Standby plan for reducing emissions - 45CSR§11-5.2
Emission inventory - WV Code 22-5-4(a)(14)
Ozone-Depleting Substances 40CFR82, Subpart F
Risk Management Plan - 40CFR68
Particulate Matter Control - 45CSR§7-5.2
Facility Construction & Operation - 45CSR13, Permit No R13-2561M
Prevent and Control Air pollution from Emission of VOCs - 45CSR21
Prevent and Control Air Pollution from Hazardous Waste TSD Facilities - 45CSR25
To Prevent and Control the Emissions of Toxic Air Pollutants - 45CSR27 (State enforceable only)
Emissions Standards for HAPs Pursuant to 40 CFR Part 63 - 40CFR63 (Flex Polyol Reactors are subject to PPP)
Protection of Stratospheric Ozone - 40CFR82
Standards of Performance for Volatile Organic Liquid Vessels - 40CFR60 (only tanks T-626 and T-632 must meet Kb) and 45CSR16.
To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations - 45CSR7

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring - 45CSR§21-46.1

Testing - WV Code §22-5-4(a)(15) and 45CSR13

Recordkeeping Requirements

- Monitoring Information - 45CSR§30-5.1.c.2.A
- Retention of records - 45CSR§30-5.1.c.2.B
- Odor - 45CSR§30-5.1.c (State enforceable only)

Reporting Requirements

- Responsible Official - 45CSR§30-4.4, 5.1.c.3.D and 5.1.c.3.E
- Certified Emissions Statement - 45CSR§30-8
- Compliance Certification - 45CSR§30-5.3.e
- Semi-annual Monitoring Reports - 45CSR§30-5.1.c.3.A
- Emergencies - Section 2.17 of Title V permit
- Deviations - 45CSR§30-5.1.c.3.B through D
- New applicable requirements - 45CSR§30-4.3.h.1.B

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

| 22. Inactive Permits/Obsolete Permit Conditions | | |
|---|---|-------------------------|
| Permit Number | Date of Issuance MM/DD/YYYY | Permit Condition Number |
| R13-749 | 07/16/1984 | |
| R1136 | 11/13/1990 | |
| R13-1182 A, B, C, D and E | 1/24/90, 1/8/99, 6/8/01, 4/21/02, 10/7/03 and 12/21/2004 | |
| R13-1400, R | 10/9/91 and 3/29/94 | |
| R13-1440 | 4/3/1992 | |
| R13-1524 | 9/22/1992 | |
| R13-1729, A and B | 6/21/94, 1/6/99 and 9/25/00 | |
| R13-1730, A and B | 6/21/94, 4/28/99 and 8/28/2003 | |
| R13-2083 | 3/21/1997 | |
| R13-2092 | 3/5/1997 | |
| R13-2429 | 6/11/2001 | |
| R13-2561 | 3/4/2004 | |
| R13-2561A | 12/16/2004 | |
| R13-2561B | 11/9/2006 | |
| R13-2561C | 4/9/2007 | |
| R13-2561D | 12/28/2007 | |
| R13-2561E | 4/18/2008 | |
| R13-2561F | 12/28/2009 | |
| R13-2561G | 9/16/2011 | |
| R13-2561H | 3/5/2012 | |
| R13-2561I | 7/19/2013 | |
| R13-2561J | 10/6/2014 | |
| R13-2561K | 8/19/2015 | |
| R30-03900102-2006 | 12/28/2006 | |
| R30-03900102-2006 (MM01) | 10/6/2008 | |

Section 3: Facility-Wide Emissions

| 23. Facility-Wide Emissions Summary [Tons per Year] | |
|--|----------------------------|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | 0.71 |
| Nitrogen Oxides (NO _x) | 6.51 |
| Lead (Pb) | 0 |
| Particulate Matter (PM _{2.5}) ¹ | 0 |
| Particulate Matter (PM ₁₀) ¹ | 0.03 |
| Total Particulate Matter (TSP) | 0 |
| Sulfur Dioxide (SO ₂) | 0 |
| Volatile Organic Compounds (VOC) | 124.0 |
| Hazardous Air Pollutants² | Potential Emissions |
| Acetaldehyde | 1.2 |
| Acrylonitrile | 0.26 |
| Benzene | 0.01 |
| Ethylbenzene | 0.01 |
| Ethylene Oxide | 1.4 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| | |
| | |
| | |
| | |

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 3: Facility-Wide Emissions

| 23. Facility-Wide Emissions Summary [Tons per Year] | |
|--|----------------------------|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | |
| Nitrogen Oxides (NO _x) | |
| Lead (Pb) | |
| Particulate Matter (PM _{2.5}) ¹ | |
| Particulate Matter (PM ₁₀) ¹ | |
| Total Particulate Matter (TSP) | |
| Sulfur Dioxide (SO ₂) | |
| Volatile Organic Compounds (VOC) | |
| Hazardous Air Pollutants² (cont'd) | Potential Emissions |
| Propionaldehyde | 2.4 |
| Propylene Oxide | 6.6 |
| Styrene | 0.96 |
| Xylene | 0.01 |
| | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| | |
| | |
| | |
| | |

¹PM_{2.5} and PM₁₀ are components of TSP.

²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

| 24. Insignificant Activities (Check all that apply) | |
|--|--|
| <input checked="" type="checkbox"/> | 1. Air compressors and pneumatically operated equipment, including hand tools. |
| <input checked="" type="checkbox"/> | 2. Air contaminant detectors or recorders, combustion controllers or shutoffs. |
| <input checked="" type="checkbox"/> | 3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment. |
| <input checked="" type="checkbox"/> | 4. Bathroom/toilet vent emissions. |
| <input checked="" type="checkbox"/> | 5. Batteries and battery charging stations, except at battery manufacturing plants. |
| <input checked="" type="checkbox"/> | 6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description. |
| <input type="checkbox"/> | 7. Blacksmith forges. |
| <input checked="" type="checkbox"/> | 8. Boiler water treatment operations, not including cooling towers. |
| <input type="checkbox"/> | 9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source. |
| <input type="checkbox"/> | 10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process. |
| <input checked="" type="checkbox"/> | 11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources. |
| <input checked="" type="checkbox"/> | 12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel. |
| <input checked="" type="checkbox"/> | 13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment. |
| <input type="checkbox"/> | 14. Demineralized water tanks and demineralizer vents. |
| <input type="checkbox"/> | 15. Drop hammers or hydraulic presses for forging or metalworking. |
| <input checked="" type="checkbox"/> | 16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam. |
| <input type="checkbox"/> | 17. Emergency (backup) electrical generators at residential locations. |
| <input checked="" type="checkbox"/> | 18. Emergency road flares. |
| <input type="checkbox"/> | 19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: |

| 24. Insignificant Activities (Check all that apply) | |
|---|---|
| <input type="checkbox"/> | 20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: |
| <input type="checkbox"/> | 21. Environmental chambers not using hazardous air pollutant (HAP) gases. |
| <input checked="" type="checkbox"/> | 22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption. |
| <input type="checkbox"/> | 23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment. |
| <input checked="" type="checkbox"/> | 24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis. |
| <input checked="" type="checkbox"/> | 25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP. |
| <input checked="" type="checkbox"/> | 26. Fire suppression systems. |
| <input checked="" type="checkbox"/> | 27. Firefighting equipment and the equipment used to train firefighters. |
| <input type="checkbox"/> | 28. Flares used solely to indicate danger to the public. |
| <input checked="" type="checkbox"/> | 29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted. |
| <input checked="" type="checkbox"/> | 30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation. |
| <input checked="" type="checkbox"/> | 31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic. |
| <input type="checkbox"/> | 32. Humidity chambers. |
| <input checked="" type="checkbox"/> | 33. Hydraulic and hydrostatic testing equipment. |
| <input type="checkbox"/> | 34. Indoor or outdoor kerosene heaters. |
| <input checked="" type="checkbox"/> | 35. Internal combustion engines used for landscaping purposes. |
| <input type="checkbox"/> | 36. Laser trimmers using dust collection to prevent fugitive emissions. |
| <input type="checkbox"/> | 37. Laundry activities, except for dry-cleaning and steam boilers. |
| <input type="checkbox"/> | 38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities. |
| <input type="checkbox"/> | 39. Oxygen scavenging (de-aeration) of water. |
| <input type="checkbox"/> | 40. Ozone generators. |

| 24. Insignificant Activities (Check all that apply) | |
|---|--|
| <input checked="" type="checkbox"/> | 41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.) |
| <input checked="" type="checkbox"/> | 42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device. |
| <input checked="" type="checkbox"/> | 43. Process water filtration systems and demineralizers. |
| <input checked="" type="checkbox"/> | 44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification. |
| <input checked="" type="checkbox"/> | 45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified. |
| <input checked="" type="checkbox"/> | 46. Routing calibration and maintenance of laboratory equipment or other analytical instruments. |
| <input type="checkbox"/> | 47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers. |
| <input type="checkbox"/> | 48. Shock chambers. |
| <input type="checkbox"/> | 49. Solar simulators. |
| <input type="checkbox"/> | 50. Space heaters operating by direct heat transfer. |
| <input checked="" type="checkbox"/> | 51. Steam cleaning operations. |
| <input checked="" type="checkbox"/> | 52. Steam leaks. |
| <input type="checkbox"/> | 53. Steam sterilizers. |
| <input checked="" type="checkbox"/> | 54. Steam vents and safety relief valves. |
| <input checked="" type="checkbox"/> | 55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized. |
| <input type="checkbox"/> | 56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list. |
| <input type="checkbox"/> | 57. Such other sources or activities as the Director may determine. |
| <input type="checkbox"/> | 58. Tobacco smoking rooms and areas. |
| <input checked="" type="checkbox"/> | 59. Vents from continuous emissions monitors and other analyzers. |

Section 5: Emission Units, Control Devices, and Emission Points

| |
|---|
| 25. Equipment Table |
| Fill out the Title V Equipment Table and provide it as ATTACHMENT D . |
| 26. Emission Units |
| For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E . |
| For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F . |
| 27. Control Devices |
| For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G . |
| For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H . |

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

Note: This Certification must be signed by a responsible official as defined in 45CSR§30-2.38.

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

| | |
|---------------------------|---|
| Name: <u>Barbara Buck</u> | Title: <u>Vice President & Site Manager</u> |
|---------------------------|---|

Responsible official's signature:

Signature: Barbara A. Buck Signature Date: 3/31/2022
(Must be signed and dated in blue ink or have a valid electronic signature)


| | |
|---|---|
| Note: Please check all applicable attachments included with this permit application: | |
| <input checked="" type="checkbox"/> | ATTACHMENT A: Area Map |
| <input checked="" type="checkbox"/> | ATTACHMENT B: Plot Plan(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT C: Process Flow Diagram(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT D: Equipment Table |
| <input checked="" type="checkbox"/> | ATTACHMENT E: Emission Unit Form(s) |
| <input type="checkbox"/> | ATTACHMENT F: Schedule of Compliance Form(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT G: Air Pollution Control Device Form(s) |
| <input type="checkbox"/> | ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s) |

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

| | | |
|---|---------------------------------|--|
| <p style="text-align: center;">Covestro LLC 437 MacCorkle Avenue South Charleston West Virginia 25303</p> | | <p>Responsible Official: Barbara J. Buck VP & Site Manager Phone: (304) 746-8012 Fax: (304) 746-8025</p> |
| <p>Confidential Information submitted by:</p> | <p>Cynthia D. Lester</p> | <p>Phone: (304) 746-8046 FAX: (304) 746-8138</p> |
| <p>Title:</p> | <p>Environmental Specialist</p> | |

| | |
|---|--|
| Reason for Submittal of Confidential Information: | Proprietary manufacturing information. |
|---|--|

| Identification of Confidential Information | Rationale for confidential claim | Confidential Treatment Time Period |
|--|---|------------------------------------|
| <p>Pages: 25,26,27,28,29, 42,43,44,45,47, 48,49,50,51,52, 53</p> | <p>a. Covestro continues to claim business confidentiality for this business. The claim has not been expired by its term, or been waived or withdrawn. The confidential information should continue to be maintained as such for an indefinite period. See attached rationale items b. through e.</p> | <p>Permanent</p> |

| | |
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| <p>Responsible Official Signature:</p> |  |
| <p>Signature Official Title:</p> | <p>Vice President & Site Manager</p> |
| <p>Date signed:</p> | <p>3/31/2022</p> |

Note: Must be signed and dated in BLUE INK

Covestro LLC Rationale for Confidential Claim (continued)

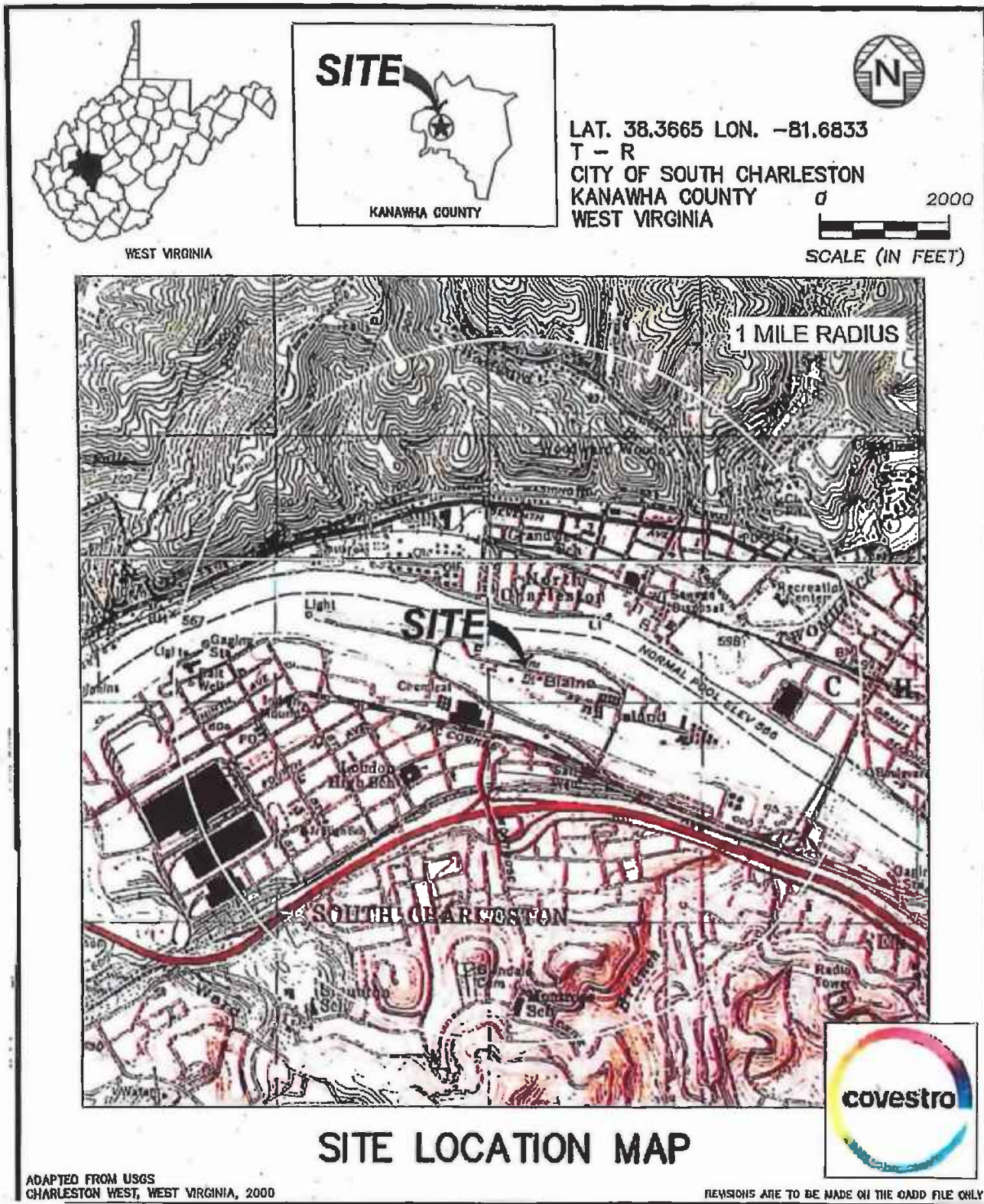
b. Information claimed confidential is not available to the general public. Within the company, Covestro has distributed technical information on a need-to-know basis and has used its business confidentiality policy to prevent inadvertent dissemination of information. This policy includes:

- Marking of business confidential documents,
- Limited distribution of documents.
- Shredding of confidentiality documents before disposal.

Employees are aware of the competitive nature of their business and are trained in guarding confidential information. Within the Covestro "Ethics Code of Business Conduct" policy is a procedure titled "Protect Confidential Information" and employees are held accountable for following the confidential information procedure.

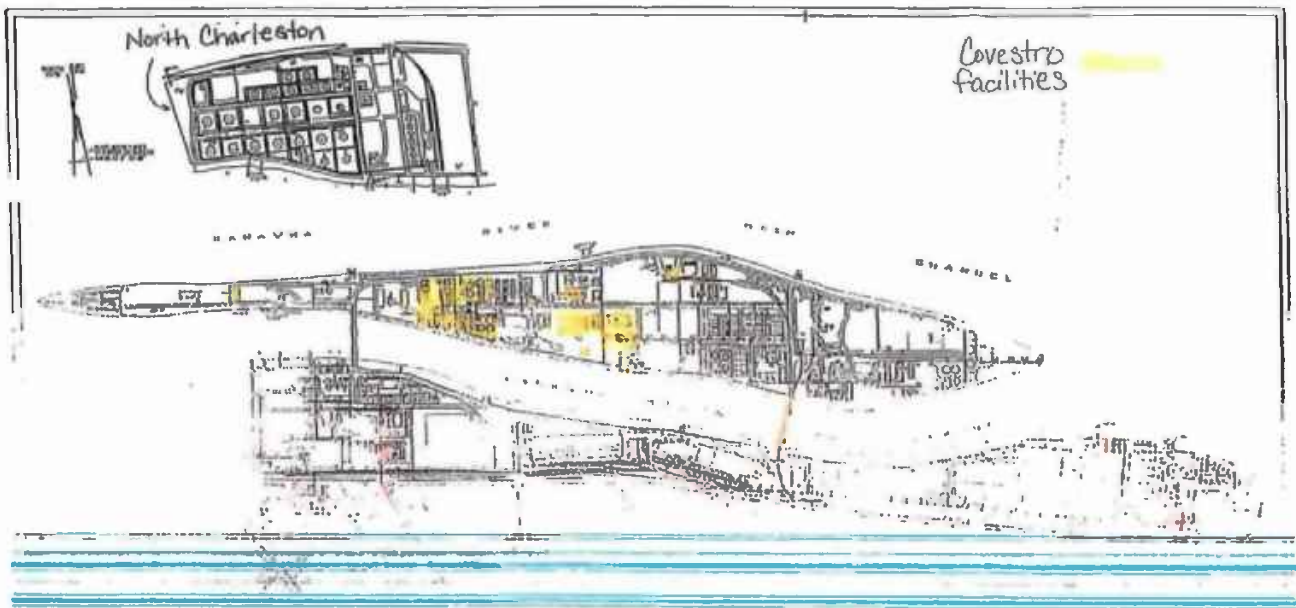
- c. Information revealing the process technology in this submittal is not reasonably obtainable by persons other than Covestro employees who need to know. To maintain the confidentiality of such information, Covestro employees involved with confidential information sign a confidentiality agreement. Transmittal of confidential information is done by certified mail or is delivered in person by a Covestro employee.
- d. There is no statute that has been reviewed that requires disclosure of information claimed to be confidential.
- e. Covestro claims business confidentiality protection for the information submitted since disclosure would allow competent engineers within a competitor's company to determine the manner or process by which Covestro produces this product and would provide competitors information without paying for technology or conducting research and development necessary to obtain the technology.

Attachment A



Attachment B
Plot Plan


Covestro South Charleston - Plot Plan



Attachment C

Detailed Process Flow Diagrams

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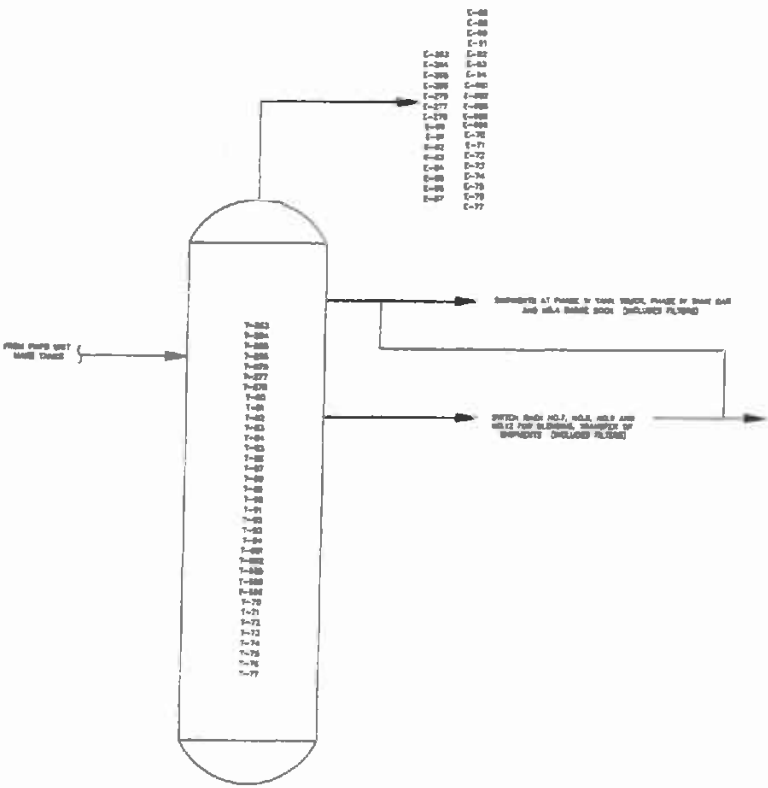
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Page 28 of 773

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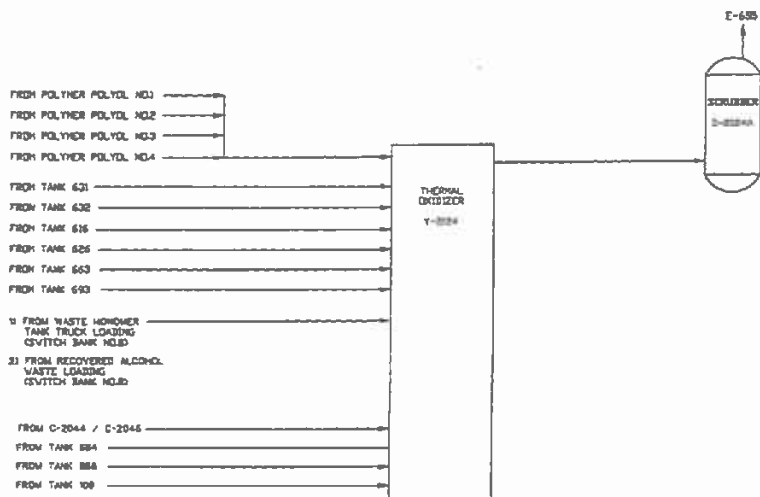
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
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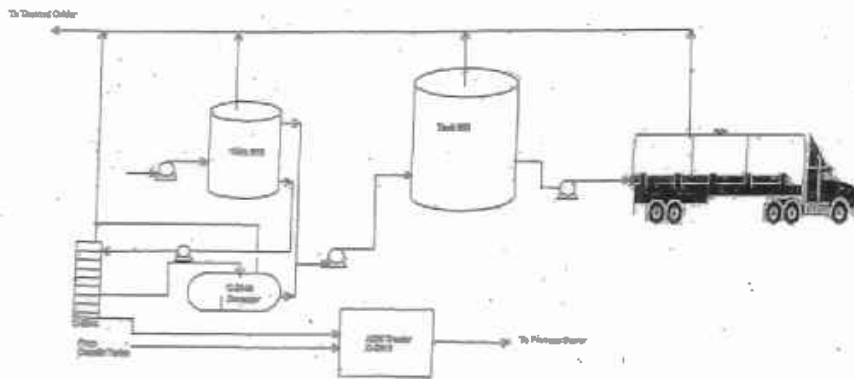
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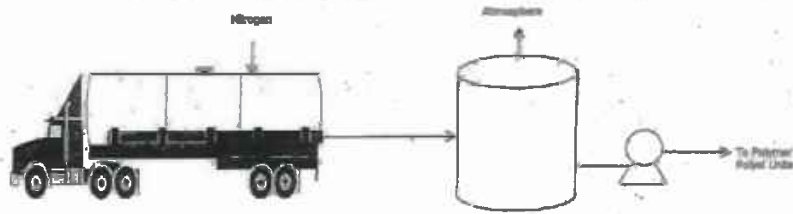


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Wastewater System

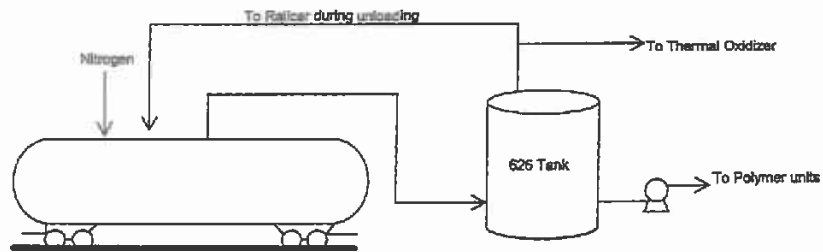


EPO Tank 1457



MSDS-870

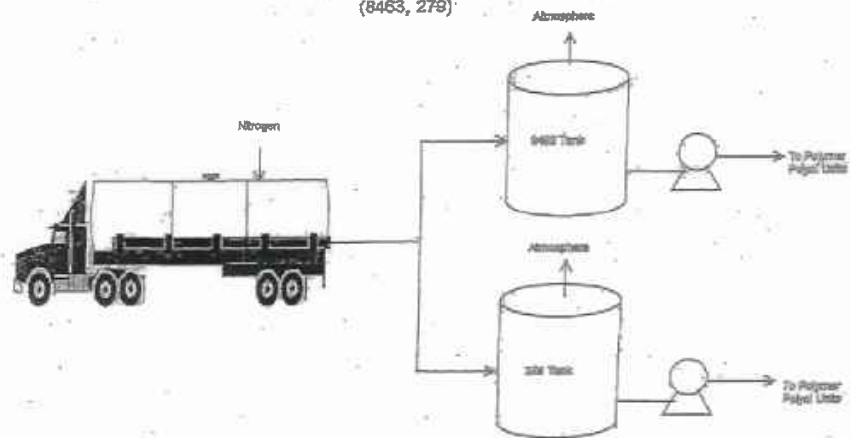
626 Tank



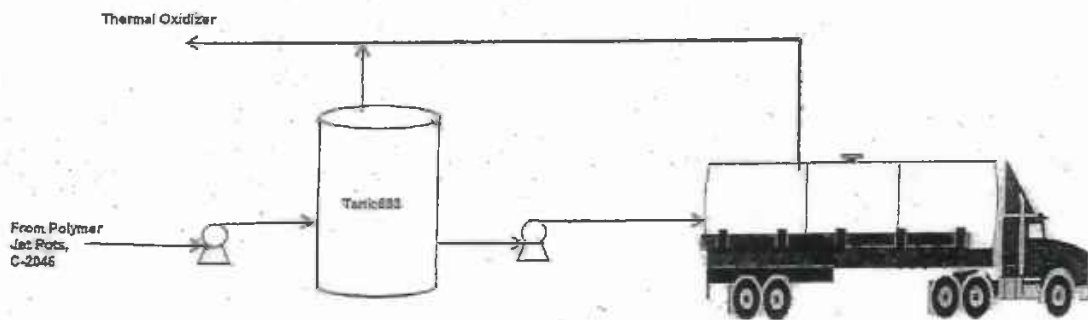
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Storage Tanks

(8463, 279)

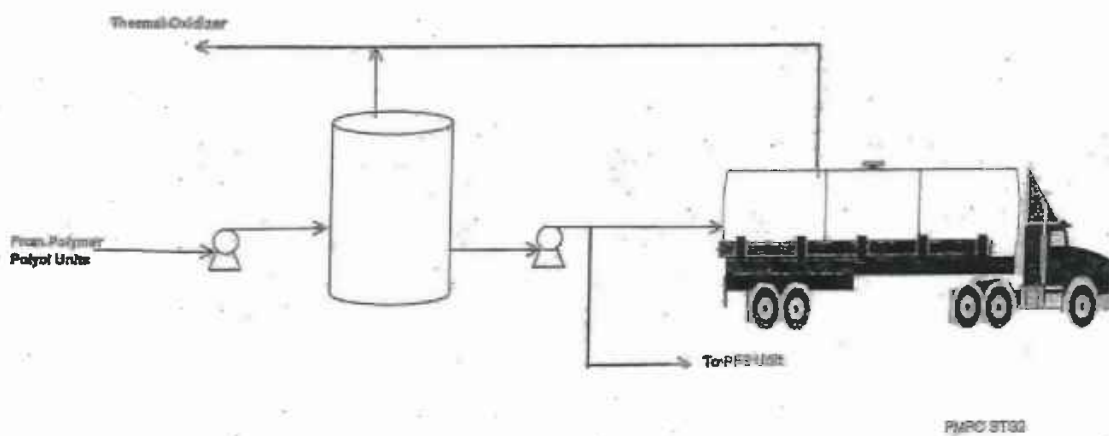


Tank 693

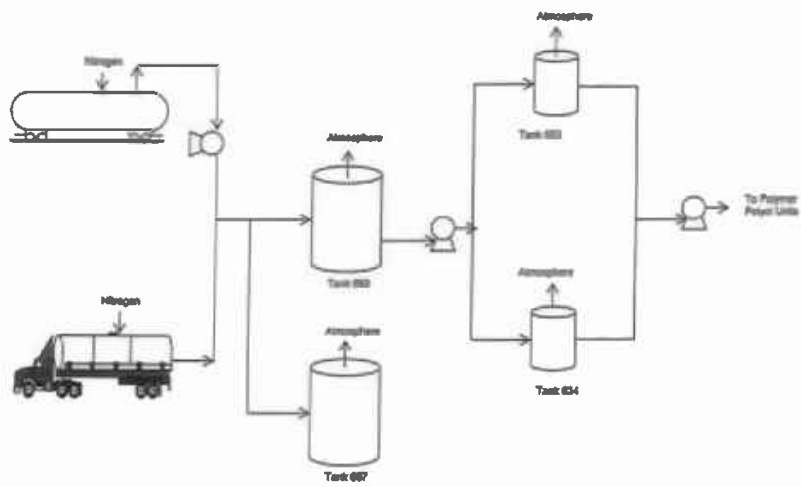


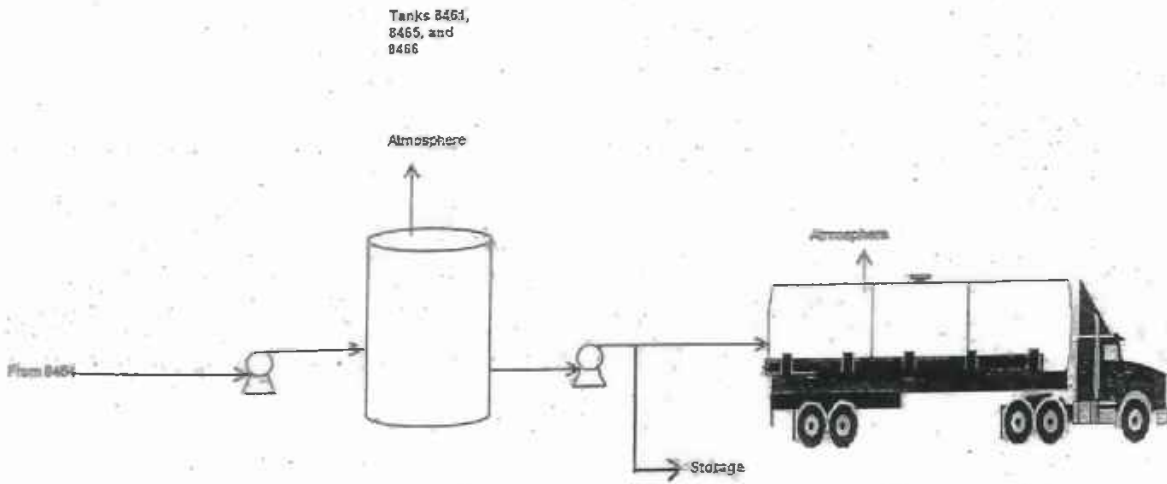
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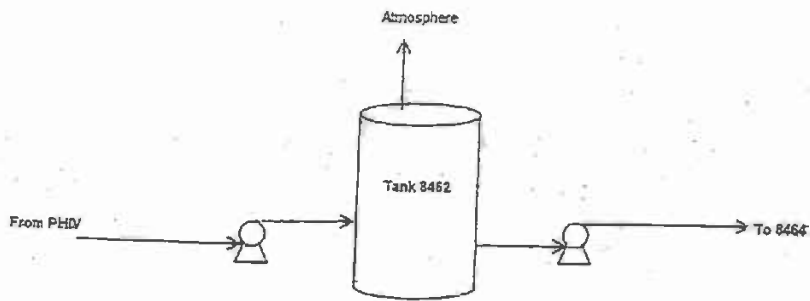


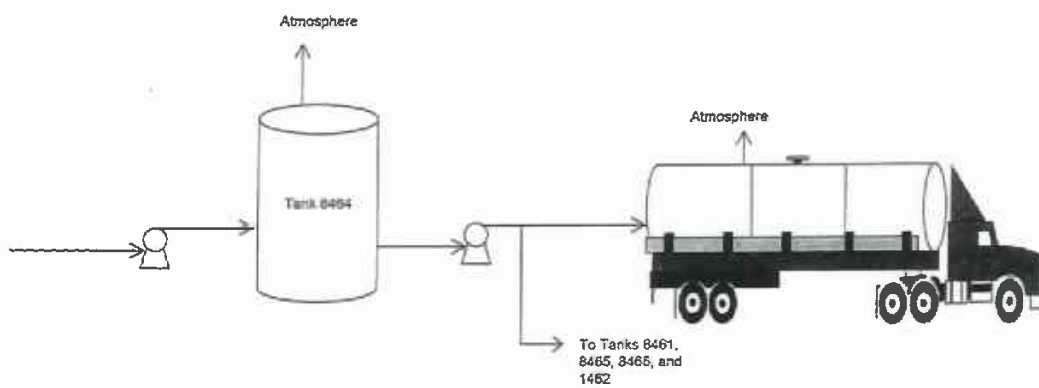
Styrene Tanks
(683, 687, 633/634)






8462 Tank






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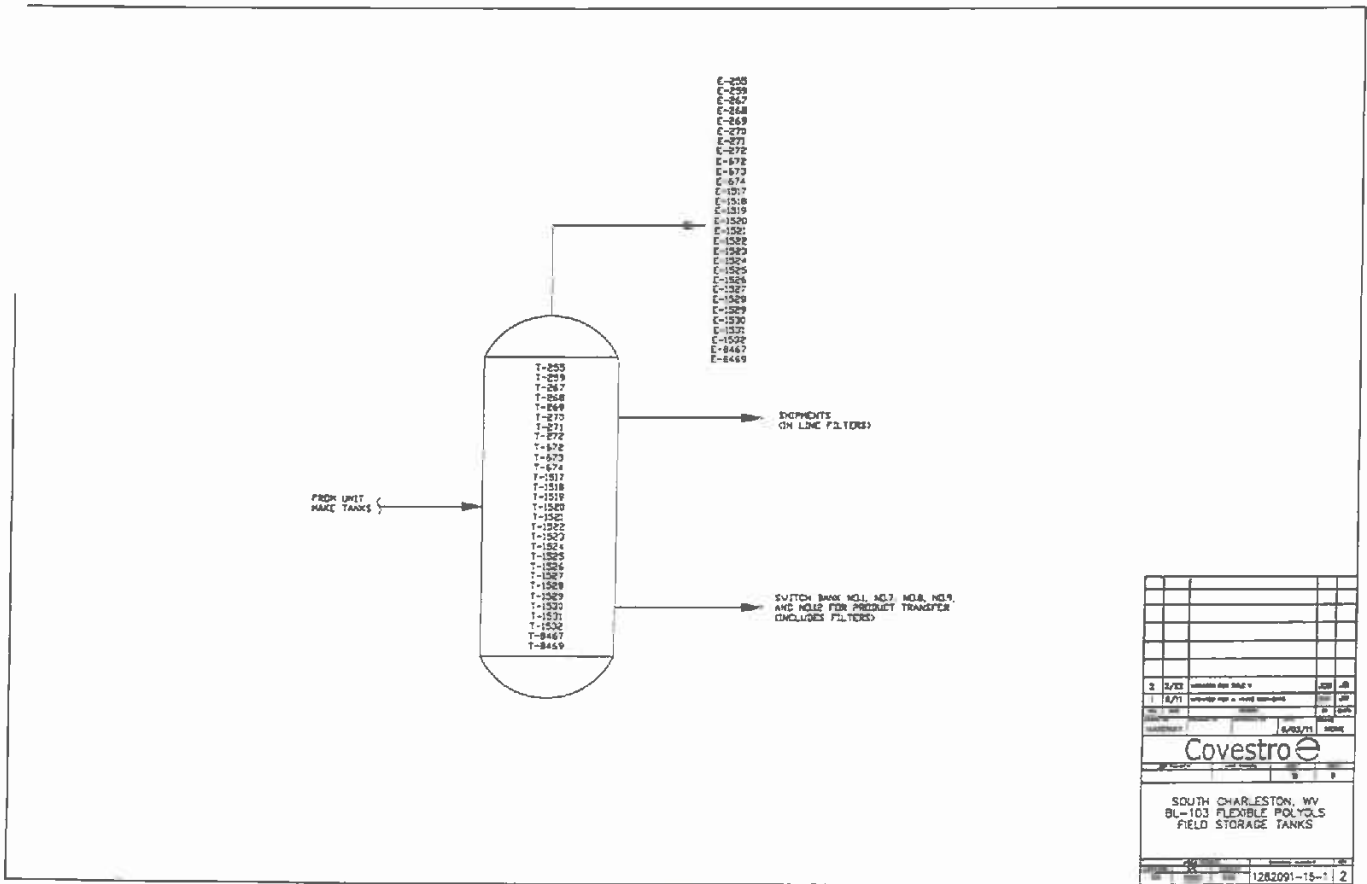
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| 85 | 1/10 | ISSUE | 1 | 100 |
| 86 | 1/10 | ISSUE | 1 | 100 |
| 87 | 1/10 | ISSUE | 1 | 100 |
| 88 | 1/10 | ISSUE | 1 | 100 |
| 89 | 1/10 | ISSUE | 1 | 100 |
| 90 | 1/10 | ISSUE | 1 | 100 |
| 91 | 1/10 | ISSUE | 1 | 100 |
| 92 | 1/10 | ISSUE | 1 | 100 |
| 93 | 1/10 | ISSUE | 1 | 100 |
| 94 | 1/10 | ISSUE | 1 | 100 |
| 95 | 1/10 | ISSUE | 1 | 100 |
| 96 | 1/10 | ISSUE | 1 | 100 |
| 97 | 1/10 | ISSUE | 1 | 100 |
| 98 | 1/10 | ISSUE | 1 | 100 |
| 99 | 1/10 | ISSUE | 1 | 100 |
| 100 | 1/10 | ISSUE | 1 | 100 |


Covestro 

SOUTH CHARLESTON, WV
STR-196 FLEXIBLE POLYOLS
NO.8 OX REFINING SYSTEM

14 1/10 88 766591-02B 2

(alternate)
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REDACTED COPY CLAIM OF CONFIDENTIALITY

| | | | | |
|---|-------|--------------------------|------------|------|
| 2 | 2/22 | REVISED FOR TITLE * | JCB | JR |
| 1 | 8/71 | REVISED FOR A WIDE RANGE | CRS | JR |
| NO | NO | NO | NO | NO |
| HARDWAY | | 8/23/71 | | NONE |
|  | | | | |
| SOUTH CHARLESTON, WV STR-196 FLEXIBLE POLYOL NO. 9 IX REFINING SYSTEM | | | | |
| NO | 22-66 | KR | 786891-02E | |

(Alternate)
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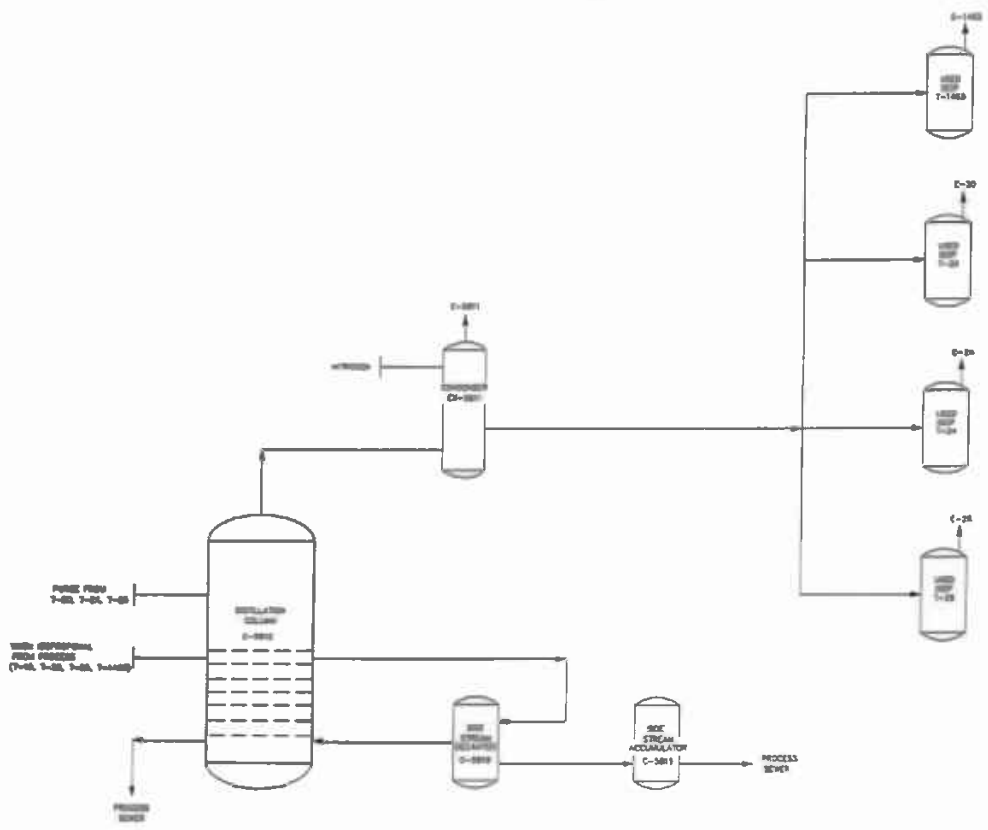
REDACTED COPY CLAIM OF CONFIDENTIALITY

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|---|------|-------------------------------|-----|----|
| 2 | 6/22 | SEARCHED FOR INFO | 200 | 22 |
| 1 | 6/21 | SEARCHED FOR A - WORK HISTORY | 200 | 22 |
| 10 | 6/21 | SEARCHED FOR A - WORK HISTORY | 200 | 22 |
| 10 | 6/21 | SEARCHED FOR A - WORK HISTORY | 200 | 22 |
| 10 | 6/21 | SEARCHED FOR A - WORK HISTORY | 200 | 22 |
| Covestro | | | | |
| SOUTH CHARLESTON, WV STR-186 NO. 10 IX | | | | |
| 10 | 6/21 | SEARCHED FOR A - WORK HISTORY | 200 | 22 |
| 10 | 6/21 | SEARCHED FOR A - WORK HISTORY | 200 | 22 |

(Alternate)
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B-196 DISTILLATION COLUMN (ISOP STILL)

NOTES



LAST LINE REARRANGED

| | | | | |
|---|------|--------------------|----------|----------|
| 1 | 2/22 | UPDATED FOR TYLE V | AKB | 0 |
| NO. | DATE | DESCRIPTION | BY | APPROVED |
| 1 | 2/22 | UPDATED FOR TYLE V | AKB | 0 |
| | | | | |
| SOUTH CHARLESTON, WV STRONG POLYMER POLYOLS DISTILLATION COLUMN (ISOP STILL) | | | | |
| PROJECT | NO. | DATE | REVISION | BY |
| B-196 | 1 | 2/22 | 1 | AKB |

Attachment D

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|---|-------------------------|----------------------------------|-------------------------|-----------------|--|
| POLYMER POLYOLS EMISSION GROUPS (PMPO) | | | | | |
| PMPO #1 | | | | | |
| T-1459 | E-1459 | Catalyst/Flex Storage | 1965 | 15,900 gal | atm vent |
| T-1460 | E-1460 | Catalyst/Flex Storage | 1965 | 15,900 gal | atm vent |
| Ex-2134 | NA | Condenser | N/A | N/A | Vents to H-2143 Vacuum Jet |
| H-2143 | E-655 | Vacuum Jets | 1984 | N/A | Vents to T.O. Y-2124 or 651 emergency bypass |
| T-2148 | E-655 | Jet Pot Decanter | N/A | N/A | vents to T.O. Y-2124 |
| T-2148 | E-651 | Jet Pot Decanter | N/A | N/A | emergency vent |
| PMPO#1 | E-651 | PMPO #1 Jets | N/A | N/A | H-2143 |
| T-1454 | E-1454 | Intermediate or make tank | 1965 | 15,700 gal | atm vent |
| T-1455 | E-1455 | Intermediate or make tank | 1967 | 15,700 gal | atm vent |
| T-1456 | E-1456 | Intermediate or make tank | 1967 | 15,700 gal | atm vent |
| T-1458 | E-1458 | Intermediate or Make Tank | 1960 | 28,000 gal | atm vent |
| T-2165 | E-2165 <i>E-2265</i> | Additive tank for BHT or PDDP | N/A | 660 gal | atm vent |
| T-2265 | E-2166 | Additive tank | N/A | 660 gal | atm vent |
| T-2305 | E-2305 | Cat mix Tank | 2003 | 530 gal | atm vent |
| PMPO #2 | | | | | |
| Ex-2224 | NA | Condenser | N/A | | Vents to H-2253 Vacuum Jet |
| H-2253 | E-655 | Vacuum Jets | N/A | | Vents to T.O. Y-2124 or E-653 emergency bypass |
| T-2248 | E-655 | Jet Pot Decanter | 1994 | N/A | vents to T.O. Y-2124 |
| T-2248 | E-653 | Jet Pot Decanter | N/A | N/A | emergency vent |
| PMPO #2 | E-653 | PMPO #2 Jets | N/A | N/A | Ex-2224 H-2253 |
| T-1453 | E-1453 | Intermediate or make tank | 1965 | 15,000 gal | atm vent |
| T-1463 | E-1463 | Intermediate or make tank | 1974 | 14,000 gal | atm vent |
| T-1464 | E-1464 | Intermediate or make tank | 1974 | 15,000 gal | atm vent |
| PMPO #3 | | | | | |
| Ex-2324 | NA | Condenser | N/A | | Vents to H-2343 Vacuum Jet |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|--|-------------------------|-----------------|--|
| H-2343 | E-655 | Vacuum Jets | N/A | | Vents to T.O. Y-2124 or E-652 emergency bypass |
| T-2348 | E-655 | Jet Pot Decanter | 1992 | 1,500 gal | vents to T.O. Y-2124 |
| T-2348 | E-652/ E-654 | Jet Pot Decanter | 1992 | 1,500 gal | emergency vent |
| PMPO #3 | E-652/ E-654 | PMPO #3 Jets | N/A | N/A | Ex-2324 H-2343 H-2253 |
| H-2353 | E-655 | 2 nd Stage Vacuum Jets | N/A | | vents to T.O. Y-2124 or E-654 emergency bypass |
| T-8480 | E-8480 | Intermediate or make tank | 1963 | 28,000 gal | atm vent |
| T-8481 | E-8481 | Intermediate or make tank | 1963 | 28,000 gal | atm vent |
| T-8482 | E-8482 | Intermediate or make tank | 1991 | 28,000 gal | atm vent |
| T-8483 | E-8483 | Intermediate or make tank | 1991 | 28,000 gal | atm vent |
| T-631 | E-655 | Recovered alcohol (feed tank for PFS) Receives from PMPO #1, 2&3 and feeds PFS. | 1966 | 32,000 gal | vents to T.O. Y-2124 |

PMPO #4

| | | | | | |
|---------|--------|--------------------------------------|------|------------|----------------------------|
| Ex-2424 | NA | Condenser | N/A | | Vents to H-2443 Vacuum Jet |
| H-2443 | E-655 | Vacuum Jets | N/A | | Vent to T.O. E-655 Y-2124 |
| T-103 | E-103 | Storage | 1990 | 17,000 gal | atm vent |
| T-2448 | E-655 | Jet Pot Decanter | 1990 | N/A | vents to T.O. Y-2124 |
| T-2448 | E-658 | Jet Pot Decanter | N/A | N/A | emergency vent |
| PMPO #4 | E-658 | PMPO #4 Jets | N/A | N/A | Ex-2424 H-2443 |
| T-105 | E-105 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-106 | E-106 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-107 | E-107 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-108 | E-108 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-8484 | E-8484 | Intermediate or make tank | 1962 | 30,000 gal | atm vent |
| T-8485 | E-8485 | Intermediate or make tank | 1962 | 30,000 gal | atm vent |
| T-2465 | E-2465 | Cooling Brine | 1990 | N/A | atm vent |
| T-2496 | E-2496 | Hot oil system for evaporator | 1990 | 400 gal | atm vent |
| T-109 | E-655 | Recycled alcohol (feed tank for PFS) | 1954 | 21,000 gal | Vents to T.O. Y-2124 |

Move to R. X. 113. Ferds p. 12 (198)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|------------------------------------|-------------------|---|--------------------------|-----------------|-----------------------------------|
| Preformed Stabilizers (PFS) | | | | | |
| C-2505 | E-2505 | #1 Catalyst charge Preblend Pot | 1994 | N/A | Atm vent |
| T-1451 | E-1451 | #2 ISOP/ Polyol storage tank (bottom) | 2002 | 15,000 gal | Atm Vent |
| T-1452 | E-1452 | #2 ISOP/Polyol Storage Tank | 1964 | 14,760 gal | Atm vent |
| T-1461 | E-1461 | #2 ISOP/Polyol Storage Tank | 1966 | 14,000 gal | Atm vent |
| T-2501 | E-2501 | #1 ISOP/Catalyst Preblend Tank | 1994 | 1,530 gal | Atm vent |
| T-2502 | E-2502 | #1 ISOP/Catalyst Preblend Tank | 1994 | 1,530 gal | Atm vent |
| PFS Storage | | | | | |
| T-632 | E-655 | PFS Storage | 1987 | 50,000 gal | Vents to T.O. Y-2124 |
| T-663 | E-655 | PFS Storage | 1984 | 15,500 gal | Vents to T.O. Y-2124 |
| T-684 | E-655 | PFS Storage | 1997 | 39,620 gal | Vents to T.O. Y-2124 |
| T-686 | E-655 | PFS Storage | 1966 | 42,000 gal | Vents to T.O. Y-2124 |
| PMPO Feed System | | | | | |
| T-2405 | E-2405 | Cat mix & feed tank (feeds liquid catalyst to PMPO #2, #3, & #4) | 2015 | 1,100 gal | Atm vent |
| T-279 | E-279 | Inhibitor Storage | 1943 | 3,800 gal | Atm Vent |
| T-8463 | E-8463 | Inhibitor Storage | 1951 | 18,500 gal | atm vent |
| T-8465 | E-8465 | Polyol Raw material staging for blends | 1951 | 18,500 gal | atm vent |
| T-626 | E-655 | Acrylonitrile Feeds all PMPO systems & PFS. | 1986 | 47,200 gal | vents to T.O. Y-2124 |
| T-633 | E-633 | Styrene Feeds all PMPO systems | 1937 | 11,700 gal | atm vent |
| T-634 | E-634 | Styrene Feeds all PMPO systems | 1937 | 11,700 gal | atm vent |
| T-683 | E-683 | Styrene Feeds all PMPO systems | 2004 | 48,000 gal | atm vent |
| T-687 | E-687 | Styrene | 2007 | 48,000 gal | atm vent - Feeds all PMPO systems |
| PMPO Support Equipment | | | | | |
| C-2044 | E-655 | "MON" NESHAP Waste Water HAP Stripper w/ E-2045 Condenser and E-2057 feed preheater | 2006 | N/A | T.O. Y-2124 |
| C-2046 | E-655 | "MON" NESHAP Waste Water Stripper Decanter | 2006 | 1,100 gal | T.O. Y-2124 |
| C-2016 | | C-2016 ACN Treater | 1991 | | APCD |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------------|-------------------------|--------------------------|----------------------|
| Y-2124 | E-655 | Thermal Oxidizer (TO) | 1984 | 512 ft ³ /min | APCD |
| T-616 | E-655 | Storage/decanting of wastewater | 2010 | 32,000 gal | Vents to T.O. Y-2124 |
| T-1462 | E-1462 | Storage (stabilizer) | 1965 | 15,000 gal | atm vent |
| T-1467 | E-1467 | Storage (Polyol) | 1974 | 30,000 gal | atm vent |
| T-1468 | E-1468 | Storage (Polyol) | 1974 | 30,000 gal | atm vent |
| T-693 | E-655 | Waste monomer tank | 2001 | 16,200 gal | vent to T.O. Y-2124 |
| T-8464 | E-8464 | Rx vessel/blending | 1951 | 18,500 gal | atm vent |
| T-8461 | E-8461 | Storage | 1951 | 37,000 gal | atm vent |
| T-8466 | E-8466 | Storage | 1951 | 18,500 gal | atm vent |
| T-8462 | E-8462 | Storage | 1951 | 37,000 gal | atm vent |
| T-112 | E-112 | Isopropanol | 2007 | 28,000 gal | atm vent |

Storage and Ancillary System

| | | | | | |
|-------|-------|-----------------------|-----------|-------------|----------|
| T-70 | E-70 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-71 | E-71 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-72 | E-72 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-73 | E-73 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-74 | E-74 | Final Product Storage | 1980 | 205,000 gal | atm vent |
| T-75 | E-75 | Final Product Storage | 1979 | 205,000 gal | atm vent |
| T-76 | E-76 | Polyol blending | 1990 | 8,400 gal | atm vent |
| T-77 | E-77 | Polyol blending | 1990 | 7,100 gal | atm vent |
| T-78 | E-78 | Polyol blending | 1990 | 3,800 gal | atm vent |
| T-79 | E-79 | Polyol blending | 1990 | 10,500 gal | atm vent |
| T-80 | E-80 | Final Product Storage | 1980 | 153,000 gal | atm vent |
| T-81 | E-81 | Final Product Storage | 1979 | 105,000 gal | atm vent |
| T-82 | E-82 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-83 | E-83 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-84 | E-84 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-85 | E-85 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-86 | E-86 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-87 | E-87 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-88 | E-88 | Final Product Storage | 1980 | 156,000 gal | atm vent |
| T-89 | E-89 | Final Product Storage | 1980 | 156,000 gal | atm vent |
| T-90 | E-90 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-91 | E-91 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-92 | E-92 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-93 | E-93 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-94 | E-94 | Final Product Storage | 1997 | 179,000 gal | atm vent |
| T-263 | E-263 | Final Product Storage | 1961 | 52,000 gal | atm vent |
| T-264 | E-264 | Final Product Storage | 1961 | 52,000 gal | atm vent |
| T-265 | E-265 | Final Product Storage | 1961 | 52,000 gal | atm vent |
| T-266 | E-266 | Final Product Storage | 2002 | 52,000 gal | atm vent |
| T-271 | E-271 | Final Product Storage | 1964 2020 | 30,300 gal | atm vent |
| T-272 | E-272 | Final Product Storage | 1964 2020 | 30,300 gal | atm vent |
| T-275 | E-275 | Final Product Storage | 1967 | 19,700 gal | atm vent |

Move to B 10 3 Final Product Storage (pg 11)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|-------------------------|-----------------|----------------|
| T-277 | E-277 | Final Product Storage | 1967 | 19,700 gal | atm vent |
| T-278 | E-278 | Final Product Storage | 1967 | 21,700 gal | atm vent |
| T-681 | E-681 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-682 | E-682 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-685 | E-685 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-688 | E-688 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-695 | E-695 | Out of PMPO service | 2003 | 280,000 gal | atm vent |
| T-696 | E-696 | Final Product Storage | 1990 | 280,000 gal | atm vent |

FLEXIBLE POLYOLS EMISSION GROUP

B103

#1 and #2 Feed System

| | | | | | |
|------------------|-------------------|--|------|------------|-----------------|
| T-276 | E-276 | Polyol starter | 1967 | 21,700 gal | atm vent |
| T-605 | E-605 | Polyol starter | 1959 | 12,400 gal | atm vent |
| T-606 | E-606 | Polyol starter | 1959 | 12,400 gal | atm vent |
| T-661 | E-661T | Polyol starter | 1953 | 11,000 gal | atm vent |
| T-662 | E-662T | Polyol starter | 1953 | 11,000 gal | atm vent |
| T-628 | E-628 | Propylene Glycol | 2002 | 11,000 gal | atm vent |
| T-659 | E-659T | Glycerin | 1994 | 20,000 gal | atm vent |
| C-3128 | E-3128 | Catalyst addition system (Rx #1) | 2003 | 105 gal | atm vent |
| C-3228 | E-3228 | Catalyst addition system (Rx #2) | N/A | 105 gal | atm vent |
| Y-3100 K-5331 | E-3100 E-5228A | Dust Collection (common) for RX #1, #2, and #3 | 2010 | N/A | atm vent (dust) |

#1 and #2 Reaction System

| | | | | | |
|--------|--------|--|------|------------|---|
| C-3101 | E-3101 | Reactor Rx #1 | 1963 | 13,900 gal | vent to vacuum hogging jets H-3192 |
| C-3201 | E-3201 | Reactor Rx #2 | 1950 | 14,280 gal | vent to vacuum hogging jets H-3192 |
| H-3192 | E-3192 | Hogging Vacuum Jets for #1 and #2 Reactors | N/A | | Atm vent (receives flow from #1 and #2) |

#1 and #2 Interim Storage

| | | | | | |
|-------|--------|--------------|------|------------|----------|
| T-613 | E-613 | Crude Polyol | 1959 | 15,000 gal | atm vent |
| T-614 | E-614 | Crude Polyol | 1959 | 15,000 gal | atm vent |
| T-667 | E-667 | Crude Polyol | 1967 | 15,000 gal | atm vent |
| T-668 | E-668 | Crude Polyol | 1967 | 15,000 gal | atm vent |
| T-643 | E-643T | Crude Polyol | 1958 | 15,000 gal | atm vent |
| T-644 | E-644T | Crude Polyol | 1958 | 15,000 gal | atm vent |

Rx #3 Feed System Related

| | | | | | |
|-------|-------|--------------------------------|------|------------|----------|
| T-647 | E-647 | Polyol starter or crude Polyol | 1959 | 13,100 gal | atm vent |
| T-648 | E-648 | Polyol starter or crude Polyol | 1959 | 13,100 gal | atm vent |
| T-103 | E-103 | Polyol starter of crude polyol | 2019 | 38,000 gal | atm vent |

Move to
B-103
Final
Product
Storage
(p11)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|---|-------------------|--|--------------------------|-----------------|--|
| T-1522 | E-1522 | Polyol starter | 2011-2021 | 54,000 gal | atm vent |
| T-273 | E-273 | Glycerine | 1963 | 8,300 gal | atm vent |
| C-3328 | E-3328 | Catalyst addition system | N/A | 105 gal | atm vent |
| K-5331 | E-3100 | Dust Collection (Common) | N/A | | atm vent (dust) |
| #3 Reaction System | | | | | |
| C-3301 | E-3301 | Reactor Rx #3 | 1928 | | Can vent to Vacuum Pump and Jets H-3316 as well |
| H-3316 | E-620 | Vacuum system #3 reactor | N/A | | atm vent |
| Rx #3 Storage & Ancillary System | | | | | |
| T-611 | E-611 | Intermediate Polyol | 1959 | 14,100 gal | atm vent |
| T-612 | E-612 | Intermediate Polyol | 1959 | 14,100 gal | atm vent |
| T-611 | E-620 | Crude Polyol Stripping | 2006 | 14,100 gal | Steam jets for T-611, T-612 and Rx #3. Vents to H-3316 |
| T-612 | E-610 | Crude Polyol Stripping | 2006 | 14,100 gal | Steam jets for T-611, T-612 and Rx #3. Vents to H-3316 |
| T-669 | E-669 | Polyol Product | 1967 | 14,100 gal | atm vent |
| T-670 | E-670 | Polyol Product | 1967 | 14,100 gal | atm vent |
| T-672 | E-672 | Polyol Product | 2004 | 100,000 gal | atm vent |
| T-259 | E-259 | Polyol Product | 1961 | 27,500 gal | atm vent |
| T-255 | E-255 | Polyol Product | 1967 | 27,500 gal | atm vent |
| T-1526 | E-1526 | Polyol Product | 1967-2020 | 51,200 gal | atm vent |
| T-8467 | E-8467 | Polyol Product | 2007 | 51,200 gal | atm vent |
| T-8469 | E-8469 | Polyol Product | 2008 | 51,200 gal | atm vent |
| T-1519 | E-1519 | Polyol Product | 1967 | 26,000 gal | atm vent |
| Refining System | | | | | |
| #1 System | | | | | |
| T-1465 | E-1465 | New ISOP feed (Common). Common to #1, 2 & 5 systems | 2003 | 14,000 gal | atm vent |
| T-656 | E-656 | ISOP Feed (Common) | 1953 | 14,800 gal | Atm vent |
| T-658 | E-658T | ISOP Feed (Common) | 1953 | 14,800 gal | Atm vent |
| T-610 | E-610S | Sulfuric acid (Common) | 2006 | 5,200 gal | Atm vent |
| C-3404 | E-662 | Cat Bed - Catalyst removal | 1996 | N/A | atm vent |
| C-3406 | E-662 | Mix Bed - Catalyst removal | 1995 | 900 gal | atm vent |
| Ex-3475 / H-3477 | E-608 | Vacuum system (evaporation equipment) Condenser / Vacuum Jet off evaporators | N/A | | Ex-3475 condenser |
| T-3478 | E-608 | Jet seal pot | | 170 gal | atm vent |

Move to B-103
Final Product Storage
(p11)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|---------------------------|-------------------|------------------------------|--------------------------|-----------------|---|
| T-3483 | E-3483 | Jet Pot Collection | | 130 gal | atm vent. For #1 and #2 systems |
| T-1466 | E-1466 | Used/recovered ISOP (Common) | 2003 | 14,800 gallons | atm vent |
| T-649 | E-649 | Crude Polyol | 1959 | 14,400 gal | atm vent |
| T-649 | E-603S | Crude Polyol Stripping | | | Steam jets for T-604, T-603, T-649 and T-650. Vent to 600 Series Vacuum Jets. |
| T-650 | E-650 | Crude Polyol | 1959 | 12,600 gal | atm vent |
| T-650 | E-603S | Crude Polyol Stripping | | | Steam jets for T-604, T-603, T-649 and T-650. Vent to 600 Series Vacuum Jets. |
| T-604 | E-604 | Crude Polyol | 1959 | 12,400 gal | atm vent |
| T-604 | E-603S | Crude Polyol Stripping | 1959 | 12,400 gal | Steam jets for T-604, T-603, T-649 and T-650. Vent to 600 Series Vacuum Jets. |
| 600 Series Vacuum Jet Pot | E-603J | Jet seal pot | | | atm vent |

#2 System

| | | | | | |
|------------------|-------|--|------|------------|-----------|
| C-3504 | E-663 | Cat Bed - Catalyst removal | 1992 | 57,200 gal | atm vent |
| C-3506 | E-663 | Mix Bed - Catalyst removal | 1992 | 750 gal | atm vent |
| EX-3575 / H-3577 | E-609 | Vacuum system (evaporation equipment) Condenser / Vacuum Jet | N/A | | Condenser |
| T-3578 | E-609 | Jet seal pot | | 200 gal | atm vent |
| T-261 | E-261 | Make tank | 1961 | 13,500 gal | atm vent |
| T-262 | E-262 | Make tank | 1961 | 13,500 gal | atm vent |
| T-257 | E-257 | Make tank | 1961 | 13,500 gal | atm vent |
| T-258 | E-258 | Make tank | 1961 | 11,000 gal | atm vent |

#5 System

| | | | | | |
|------------------|--------|--|------|------------|---|
| C-3604 | E-664 | Cat Bed - Catalyst removal | 1966 | 2,800 gal | atm vent |
| C-3606 | E-664 | Mix Bed - Catalyst removal | 1966 | 830 gal | atm vent |
| Ex-3675 / H-3677 | E-610 | Vacuum system (evaporation equipment) Condenser / Vacuum Jet | N/A | | Condenser |
| T-3678 | E-610 | Jet seal pot | 1979 | 80 gal | atm vent |
| T-603 | E-603 | Crude Polyol | 1959 | 12,100 gal | atm vent |
| T-603 | E-603S | Crude Polyol Stripping | | | Steam jets for T-604, T-603, T-649 and T-650. Vent to 600 Series Vacuum Jets. |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|--------------------------|-----------------|--|
| T-645 | E-645 | Crude Polyol | 1958 | 14,100 gal | atm vent |
| T-646 | E-603S | Crude Polyol Stripping | 1958 | 14,100 gal | Steam jets for T-604, T-603, T-649 and T-650. Vent to 600 Series Vacuum Jets. |

B103 Final Product Storage

| | | | | | |
|--------|--------|---------------------------|------|-------------|----------|
| T-267 | E-267 | Product storage | 1961 | 50,400 gal | atm vent |
| T-268 | E-268 | Product storage | 1961 | 50,400 gal | atm vent |
| T-269 | E-269 | Product storage & starter | 1961 | 50,000 gal | atm vent |
| T-270 | E-270 | Product storage | 1961 | 50,400 gal | atm vent |
| T-673 | E-673 | Product storage | 2004 | 100,000 gal | atm vent |
| T-674 | E-674 | Product storage | 2004 | 100,000 gal | atm vent |
| T-1517 | E-1517 | Product storage | 2006 | 27,500 gal | atm vent |
| T-1518 | E-1518 | Product storage | 1966 | 27,000 gal | atm vent |
| T-1520 | E-1520 | Product storage | 1967 | 27,000 gal | atm vent |
| T-1521 | E-1521 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1523 | E-1523 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1524 | E-1524 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1527 | E-1527 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1528 | E-1528 | Product storage | 2004 | 50,500 gal | atm vent |
| T-1529 | E-1529 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1530 | E-1530 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1525 | E-1525 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1531 | E-1531 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1532 | E-1532 | Product storage | 1967 | 50,500 gal | atm vent |

Add
 (1) T-271
 & T-272
 (from pg 7)
 (2) T-1522
 (from pg 9)
 (3) T-1526
 (from pg 9)
 and
 (4) T-6747
 &
 (5) T-6748
 (from pg 11)

B196 Phase IV

Rx #7, #8 and #9 Feed and Vacuum System

| | | | | | |
|--------|-----------|----------------------------|------|------------|-------------------------------|
| T-1 | E-1 | Polyol starter | 2004 | 25,200 gal | atm vent |
| T-2 | E-2 | Polyol starter | 2004 | 25,200 gal | atm vent |
| T-9 | E-9 | Polyol starter | 1967 | 23,000 gal | atm vent |
| T-10 | E-10 | Polyol starter or glycerin | 1967 | 21,800 gal | atm vent |
| T-18 | E-18 | Polyol starter | 1974 | 22,200 gal | atm vent |
| H-5416 | E-5416 or | Vacuum Jets | N/A | | Receives flow from #7, 8 & 9. |
| H-5216 | E-5216 | Vacuum Pump | | | |

Rx #7, #8 and #9 Reaction System

| | | | | | |
|--------|--------|-------------------|------|------------|---|
| C-5201 | E-636 | #7 Reactor | 1974 | 22,300 gal | Can vent to Vacuum Jets H-5416 and H-5216 vacuum pump as well |
| T-5316 | E-5316 | Hot well (Common) | | 80 gal | atm vent |
| C-5301 | E-637 | #8 Reactor | 1974 | 19,400 gal | Can vent to Vacuum Jets H-5416 and H-5216 vacuum pump as well |
| C-5401 | E-638 | #9 Reactor | 1974 | 61,830 gal | Can vent to Vacuum Jets H-5416 and H-5216 vacuum pump as well |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|--|-------------------|--|-------------------------|-----------------|----------------|
| T-5340A | E-5340A | Liquid KOH addition | 1992 | 4,680 gal | atm vent |
| T-5340B | E-5340B | Liquid KOH addition | 1992 | 4,680 gal | atm vent |
| Interim Storage | | | | | |
| T-3 | E-3 | Crude storage | 2003 | 25,300 gal | atm vent |
| T-4 | E-4 | Crude storage | 2003 | 25,300 gal | atm vent |
| T-5 | E-5 | Crude storage | 2003 | 25,300 gal | atm vent |
| T-6 | E-6 | Crude storage | 2003 | 25,300 gal | atm vent |
| T-7 | E-7 | Crude storage | 2003 | 25,300 gal | atm vent |
| T-8 | E-8 | Crude storage same as T-3 for all | 2003 | 25,300 gal | atm vent |
| Rx #7, #8, #9 and #10 Refining System | | | | | |
| T-20 | E-20 | Fresh ISOP | 1974 | 22,000 gal | atm vent |
| T-24 | E-24 | Fresh ISOP | 1967 | 22,000 gal | atm vent |
| T-26 | E-26 | Fresh ISOP | 1973 | 22,000 gal | atm vent |
| T-19 | E-19 | Use/recovered ISOP | 1974 | 22,000 gal | atm vent |
| T-23 | E-23 | Use/recovered ISOP | 1967 | 22,000 gal | atm vent |
| T-25 | E-25 | Use/recovered ISOP | 1973 | 22,000 gal | atm vent |
| C-5504 | E-640 | #7 Cat Bed - Catalyst removal | 1974 | 6,840 gal | atm vent |
| C-5506 | E-643 | #7 Mix Bed - Catalyst removal | 1974 | 3,870 gal | atm vent |
| T-17 | E-17 | H ₂ SO ₄ storage | 2002 | 6,500 gal | atm vent |
| T-5550 | E-5550 | #7 IX Surge Tank | 1974 | 22,000 gal | atm vent |
| T-5650 | E-5650 | #8 IX Surge Tank | 1974 | 22,000 gal | atm vent |
| T-5750 | E-5750 | #9 IX Surge Tank | 1974 | 22,000 gal | atm vent |
| H-242 | E-242 | Evaporation vacuum system | N/A | | atm vent |
| T-5678 | E-5678 | Jet seal pot | 1965 | 260 gal | atm vent |
| T-11 | E-11 | Make tank | 1974 | 26,000 gal | atm vent |
| T-12 | E-12 | Make tank | 1974 | 26,000 gal | atm vent |
| T-310 | E-310 | Inhibitor Pot | | N/A | atm vent |
| C-5604 | E-641 | #8 Cat Bed - Catalyst removal | 1974 | 6,840 gal | atm vent |
| C-5606 | E-644 | #8 Mix Bed - Catalyst removal | 1974 | 2,530 gal | atm vent |
| H-230 | E-230 | Evaporation vacuum system | N/A | | atm vent |
| T-13 | E-13 | Make tank | 1974 | 26,000 gal | atm vent |
| T-14 | E-14 | Make tank | 1974 | 26,000 gal | atm vent |
| C-5704 | E-642 | #9 Cat Bed - Catalyst removal | 1974 | 6,840 gal | atm vent |
| C-5706 | E-645 | #9 Mix Bed - Catalyst removal | 1974 | 2,500 gal | atm vent |
| H-267 | E-267 | Evaporation vacuum system | N/A | | atm vent |
| T-15 | E-15 | Make tank | 1974 | 26,000 gal | atm vent |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|-------------------------------------|-------------------|---|-------------------------|-----------------|-------------------------|
| T-16 | E-16 | Make tank | 1974 | 26,000 gal | atm vent |
| C-5804 | E-5804 | #10 Cat Bed – Catalyst removal | 2004 | 9,600 gal | atm vent |
| C-5806 | E-5806 | #10 Mix Bed – Catalyst removal | 2004 | 4,000 gal | atm vent |
| B196 Final Storage Tanks | | | | | |
| T-60 | E-60 | Product storage | 1974 | 270,000 gal | atm vent |
| T-61 | E-61 | Product storage | 1974 | 280,000 gal | atm vent |
| T-62 | E-62 | Product storage | 1974 | 143,000 gal | atm vent |
| T-63 | E-63 | Product storage | 2002 | 143,000 gal | atm vent |
| T-64 | E-64 | Product storage | 2002 | 143,000 gal | atm vent |
| T-65 | E-65 | Product storage | 1974 | 143,000 gal | atm vent |
| T-66 | E-66 | Product storage | 1980 | 203,000 gal | atm vent |
| T-67 | E-67 | Product storage | 1980 | 203,000 gal | atm vent |
| T-68 | E-68 | Product storage | 1974 | 266,000 gal | atm vent |
| T-698 | E-698 | Product Storage | 2004 | 280,000 gal | atm vent |
| T-6797 | E-6797 | Intermediate storage | 1994 | 50,000 gal | atm vent |
| T-6798 | E-6798 | Product storage | 1994 | 50,000 gal | atm vent |
| T-6799 | E-6799 | Intermediate storage | 1994 | 50,000 gal | atm vent |
| Distillation Column | | | | | |
| C-5812/ C-5811 Column / Condenser | E-639 | ISOP Distillation Column System | 1961 | 4,980 gallons | atm vent |
| Supply Chain PO Distribution | | | | | |
| PO Distribution | | | | | |
| C-2090 | None | Carbon Treater (Normal Operation) | 1996 | 2,730 gal | None |
| | E-25, E-26 & E-27 | Carbon Treater (Activation/Deactivation) Vents to Boiler | | | DOW Boiler 25, 26 or 27 |
| C-2090B | None | Carbon Treater (Normal Operation) | 1997 | 2,730 gal | None |
| | E-25, E-26 & E-27 | Carbon Treater (Activation/Deactivation) Vents to Boiler | | | DOW Boiler 25, 26 or 27 |
| C-101 | N/A | PO Storage (South Sphere) | 1942 | 168,000 gal | Vapor balanced |
| C-102 | N/A | PO Storage (North Sphere) | 1942 | 168,000 gal | Vapor balanced |
| T-9016 | N/A | PO Storage (North Charleston Tank Farm) | 1969 | 420,000 gal | Vapor balanced |
| T-9017 | N/A | PO Storage (North Charleston Tank Farm) | 1959 | 350,000 gal | Vapor balanced |
| EO Distribution | | | | | |
| C-7000 | Fugitive | EO Storage Tank | 2015* | 82,000 gal | Vapor Balanced |
| Y-7101 | E-7101 | EO Scrubber | 2015* | N/A | Y-7101 |
| D-7102 | E-7101 | EO Reaction Tank | 2015* | 4,400 gal | Y-7101 |
| D-7103 | E-7101 | EO Reaction Tank | 2015* | 4,400 gal | Y-7101 |
| C-7203 | E-7203 | Chiller Tank | 2015* | 640 gal | atm vent |

Move to B103 Final Product Stry (all)

Remove B-25 & E-27

Equip. Not installed

Not installed

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|-------------------------|-----------------|----------------|
| V-7200 | None | Chiller | 2015* | N/A | N/A |

* The installation date for the EO Distribution emission units is for underlying NSR permit, but the equipment has not been installed as of the date of issuance of this renewal Title V operating permit.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|---------------|------------------|
| R13-2561M | 10/15/2020 |

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1458 | Emission unit name: E-1458 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #1)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1960 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
28,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.01767 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01178 |
| Styrene | N/A | 0.00588 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2305 | Emission unit name: E-2305 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Cat Mix Tank Feeds PMPO #1

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks -- gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1459 | Emission unit name: E-1459 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Catalyst/Flex Storage (PMPO #1)

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,900 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1460 | Emission unit name: E-1460 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Catalyst/Flex Storage (PMPO #1)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
15,900 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1454 | Emission unit name: E-1454 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #1)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,700 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.01767 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01178 |
| Styrene | N/A | 0.00588 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1455 | Emission unit name: E-1455 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #1)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,700 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.01767 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01178 |
| Styrene | N/A | 0.00588 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1456 | Emission unit name: E-1456 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #1)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,700 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.01767 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01178 |
| Styrene | N/A | 0.00588 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2165 | Emission unit name: E-2165 | List any control devices associated with this emission unit: None |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Inhibitor addition tank

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1,500 gallons

| | | |
|-----------------------------------|-----------------------------------|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2265 | Emission unit name: E-2265 | List any control devices associated with this emission unit: None |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Inhibitor addition tank

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1,500 gallons

| | | |
|-----------------------------------|-----------------------------------|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-2148 (PMPO #1 Jet pot)/H-2143 (Jet emergency vent) | Emission unit name: E-651 | List any control devices associated with this emission unit: H-2143 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Steam evacuator system and associated equipment venting during periods of shutdown and/or malfunction of Thermal Oxidizer/waste gas header

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 N/A

| | | |
|--|--|---|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: N/A |
|--|--|---|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.01 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.02 | 0.01 |
| Styrene | 0.01 | 0.01 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering calculations</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 4.1.6



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 4.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-2248 (PMPO #2 jet pot)/H-2253 (Jet emergency vent) | Emission unit name: E-653 | List any control devices associated with this emission unit: H-2253 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Steam evacuator system and associated equipment venting during periods of shutdown and/or malfunction of Thermal Oxidizer/waste gas header

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
N/A

| | | |
|--|--|---|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: N/A |
|--|--|---|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.01 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.02 | 0.01 |
| Styrene | 0.01 | 0.01 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering calculations</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 4.1.6



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 4.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|---|---|--|-----------|
| Emission unit ID number: T-1453 | Emission unit name: E-1453 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Intermediate or Make Tank - PMPO #2</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 15,000 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.02367 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01578 |
| Styrene | N/A | 0.00788 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1463 | Emission unit name: E-1463 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #2)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
14,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.02367 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01578 |
| Styrene | N/A | 0.00788 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1464 | Emission unit name: E-1464 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #2)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.02367 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.01578 |
| Styrene | N/A | 0.00788 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|---|--|
| Emission unit ID number: T-2348 (PMPO #3 jet pot)/H-2343 and H-2353 (Jet emergency vents) | Emission unit name: E-652 and E-654 | List any control devices associated with this emission unit: H-2343 and H-2353 |
|---|---|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Steam evacuator system and associated equipment venting during periods of shutdown and/or malfunction of the Thermal Oxidizer/waste gas header

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
N/A

| | | |
|--|--|---|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: N/A |
|--|--|---|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.01 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.02 | 0.01 |
| Styrene | 0.01 | 0.01 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering calculations</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 4.1.6

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 4.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-8480 | Emission unit name: E-8480 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Intermediate or Make Tank (PMPO #3)</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1963 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp): 29,000 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,500,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.21723 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.02561 |
| Styrene | N/A | 0.01278 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8481 | Emission unit name: E-8481 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #3)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1963 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
29,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,500,000 gal/yr | Maximum Operating Schedule: 24/7-365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.21723 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.02561 |
| Styrene | N/A | 0.01278 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8482 | Emission unit name: E-8482 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #3)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1991 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
29,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,500,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.21723 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.02561 |
| Styrene | N/A | 0.01278 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8483 | Emission unit name: E-8483 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #3)

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1991 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
29,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,500,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.21723 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | N/A | 0.02561 |
| Styrene | N/A | 0.01278 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-1451 | Emission unit name: E-1451 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>#2 ISOP/Polyol Storage Tank - PFS</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 15,000 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 556,002 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| <p>Describe each fuel expected to be used during the term of the permit.</p> | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.008 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-2448 (PMPO #4 jet pot)/H-2443 (Jet emergency vent) | Emission unit name: E-658 | List any control devices associated with this emission unit: H-2443 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Steam Evacuator system and associated equipment venting during periods of shutdown and/or malfunction of the Thermal Oxidizer/waste gas header

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 N/A

| | | |
|--|--|---|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: N/A |
|--|--|---|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.01 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.02 | 0.01 |
| Styrene | 0.01 | 0.01 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering calculations</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 4.1.6



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 4.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-105 | Emission unit name: E-105 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #4)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1962 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 17,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-106 | Emission unit name: E-106 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #4)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1962 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 17,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-107 | Emission unit name: E-107 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #4)

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1962 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 17,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-108 | Emission unit name: E-108 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #4)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1962 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 17,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8484 | Emission unit name: E-8484 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #4)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1962 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 17,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8485 | Emission unit name: E-8485 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Intermediate or Make Tank (PMPO #4)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1962 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
30,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 17,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2465 | Emission unit name: E-2465 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Cooling brine

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1300

| | | |
|-----------------------------------|--|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: 50,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | | |
| Nitrogen Oxides (NO _x) | | |
| Lead (Pb) | | |
| Particulate Matter (PM _{2.5}) | | |
| Particulate Matter (PM ₁₀) | | |
| Total Particulate Matter (TSP) | | |
| Sulfur Dioxide (SO ₂) | | |
| Volatile Organic Compounds (VOC) | | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2496 | Emission unit name: E-2496 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Hot Oil System for Evaporator (PMPO #4)

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
400 gallons

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.78 | 0.0043 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

API-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-109 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO. Y2124 | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Recycle alcohol (feed tank for PFS)</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1954 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp): 21,000 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 730,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2651M, 4.1.4
R13-2651M, 6.1.3

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2651M, 6.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1451 | Emission unit name: E-1451 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

#2 ISOP/Polyol Storage Tank - PFS

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 556,002 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.1735 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|--|---|--|-----------|
| Emission unit ID number: T-1452 | Emission unit name: E-1452 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>#2 ISOP/Polyol Storage Tank - PFS</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1964 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 14,760 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2 | 0.32 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1461 | Emission unit name: E-1461 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

#2 ISOP/Polyol Storage Tank - PFS

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1966 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,000 gallons

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.3165 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2501 | Emission unit name: E-2501 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

#1 ISOP/Catalyst Preblend Tank - PFS

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1994 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
1,530 gallons

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.02 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-2502 | Emission unit name: E-2502 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

#1 ISOP/Catalyst Preblend Tank - PFS

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| | | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1994 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 1,530 gallons

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?
 Indirect Fired Direct Fired

Maximum design heat input and/or maximum horsepower rating: **Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.02 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-632 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO Y-2124 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PFS Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1987 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
50,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 3,500,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>This tanks vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40CFR16 Standards of Performance for New Stationary Sources Pursuant to CFR Part 60
WV Regulation 27
R13-2561M, 5.1.1
R13-2561M, 5.4.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 5.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-663 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to T.O. (Y-2124) |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PFS Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1984 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,500 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 3,500,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2561M, 5.1.1
R13-2561M, 5.4.4



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 5.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-684 | Emission unit name: E-684 | List any control devices associated with this emission unit: Vents to T.O. (Y-2124) | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>PFS Storage</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1997 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 39,620 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2561M, 5.1.1
R13-2561M, 5.4.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 5.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-686 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO Y-2124 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PFS Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1966 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
42,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,100,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2561M, 5.1.1
R13-2561M, 5.4.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 5.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|-----------|
| Emission Unit Description | | | |
| Emission unit ID number: T-2405 | Emission unit name: E-2405 (tank) and E-657 (exhaust fan) | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Mixing Tank for Catalyst Addition for PMPO #2, #3 and #4 - PMPO Feed System</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2015 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 950 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| <p>Describe each fuel expected to be used during the term of the permit.</p> | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.2 | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-279 | Emission unit name: E-279 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Additive Storage - PMPO Feed System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1943 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
3,800 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 120,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.0005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>N/A</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8463 | Emission unit name: E-8463 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Additive Storage - PMPO Feed System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1951 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
18,500 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 120,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.0005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

API-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8465 | Emission unit name: E-8465 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Raw Material Storage for Blends - PMPO Feed System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| | | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1951 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
18,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 235,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.35 | 0.01 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

API-42 and Engineering Estimates

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-626 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO Y-2124 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Acrylonitrile Feeds all PMPO systems and PFS

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1986 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
47,200 gallons

| | | |
|-----------------------------------|--|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: 10,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0 | 0 |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40CFR16 Standards of Performance for New Stationary Sources pursuant to CFR Part 60
R13-2561M, 4.1.4
R13-2561M, 6.1.4
WV Regulation 27

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:

T-633

Emission unit name:

E-633

List any control devices associated with this emission unit:

Atm vent

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Styrene feeds all PMPO systems - PMPO Feed System

Manufacturer:

Model number:

Serial number:

Construction date:
MM/DD/YYYY

Installation date:
MM/DD/YYYY
1937

Modification date(s):
MM/DD/YYYY

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):

11,700 gallons

Maximum Hourly Throughput:
N/A

Maximum Annual Throughput:
13,400,000 gal/yr

Maximum Operating Schedule:
24/7/365

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?

Indirect Fired Direct Fired

Maximum design heat input and/or maximum horsepower rating:

Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Styrene | 0.72 | 0.24 |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 / Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 6.1.2



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|---|--|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-634 | Emission unit name: E-634 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Styrene feeds all PMPO systems - PMPO Feed System</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1937 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 11,700 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 13,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Styrene | 0.72 | 0.24 |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 / Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 6.1.2

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-683 | Emission unit name: E-683 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Styrene feeds all PMPO systems - PMPO Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
48,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 13,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Styrene | 3.76 | 0.368 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate / Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 6.1.4



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-687 | Emission unit name: E-687 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Styrene feeds all PMPO systems - PMPO Feed System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2007 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
48,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 13,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Styrene | 3.76 | 0.368 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate / Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 6.1.4



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-631 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO Y-2124 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Recovered Alcohol (feed tank for PFS). Receives from PMPO #1, #2 and #3 - PMPO Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1966 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
32,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | 0 | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2561M, 4.1.4
R13-2561M, 6.1.3
R13-2561M, 6.1.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1
R13-2561M, 6.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1457 | Emission unit name: E-1457 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

EPO Storage Tank - PMPO Feed System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,200 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 361,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.13 | 0.00865 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

API-42 and Engineering Estimate

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1462 | Emission unit name: E-1462 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Storage PMPO (Stablizer) - PMPO Support System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal.

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-1467 | Emission unit name: E-1467 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>PMPO Storage (Polyol) - PMPO Support System</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 30,000 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1468 | Emission unit name: E-1468 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PMPO Storage (Polyol) - PMPO Support System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|-------------------------------------|---|
| Emission unit ID number: Wastewater Stripper (C-2044) with E-2045 and E-2057 Feed Preheater | Emission unit name: E-655 | List any control devices associated with this emission unit: C-2044, C-2016, Y-2124 and D-2124A |
|---|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Steam stripper

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|---|-----------------------------------|--|
| Maximum Hourly Throughput: 50,000 lb/hr | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|---|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Vapor emissions from the steam stripper go to the thermal oxidizer and all air emissions are included in E-655 permit limits (R13-2561M). Wastewater from the stripper goes to the acrylonitrile treater (C-2016) for additional HAP removal.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 6.1.11
R13-2561M, 6.1.12

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.3

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|------------------------------------|--|
| Emission unit ID number: Acrylonitrile Treater | Emission unit name: None | List any control devices associated with this emission unit: C-2044 and C-2016 |
|--|------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Plug flow reactor that utilizes a strong base to react with HAPs in wastewater stream

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|---|-----------------------------------|--|
| Maximum Hourly Throughput: 50,000 lb/hr | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|---|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Wastewater sampling test in September 2007</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 6.1.11



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.3

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-616 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO (Y-2124) |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Storage/Decanting of wastewater - PMPO Support System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2010 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
32,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 73,500,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

This tank vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2561M)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2561M, 4.1.4
R13-2561M, 6.1.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-693 | Emission unit name: E-655 | List any control devices associated with this emission unit: Vents to TO Y-2124 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Waste Monomer Tank - PMPO Support System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2001 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
16,200 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 585,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

This tanks vents to the Thermal Oxidizer and these emissions are included in E-655 permit limits (R13-2651M)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 27
R13-2561M, 4.1.4
R13-2561M, 6.1.3
R13-2561M, 6.1.4



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 6.2.1
R13-2561M, 6.2.2

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|-------------------------------------|---|
| Emission unit ID number: Thermal oxidizer and associated scrubber | Emission unit name: E-655 | List any control devices associated with this emission unit: Y-2124 |
|---|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two strike, non-emergency or emergency, certified or not certified, as applicable):

Incineration and packed bed scrubber for Cl₂ and HCl removal.

| | | |
|---|---|--|
| Manufacturer: McGill Incorporated | Model number: Custom Designed | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|--|--|--|
| Maximum Hourly Throughput: 514 lb/hr waste gas | Maximum Annual Throughput: N/A | Maximum Operating Schedule: 24/7 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|---|
| Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired |
|--|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: 3 million BTU/hr | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas is used to supplement flammable waste gas inlet stream.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-------------|---------------------|------------------|-----------|
| Natural gas | N/A | N/A | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | 0.18 | 0.71 |
| Nitrogen Oxides (NO _x) | 1.65 | 6.51 |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.39 | 0.32 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.01 |
| Benzene | 0.1 | 0.01 |
| Vinylidene chloride | 0.04 | 0.15 |
| Ethylbenzene | 0.1 | 0.01 |
| Xylene | 0.1 | 0.01 |
| Chlorine | 0.18 | 2.29 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| HCl | 0.58 | 2.29 |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Stack testing and engineering calculations. Last stack test was April 1998.</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 4.1.5

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 4.2.2
R13-2561M, 4.4.3
R13-2561M, 4.4.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8464 | Emission unit name: E-8464 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Rx Vessel/Blending - PMPO Support System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1951 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
18,500 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,600,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.32 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|---|---|--|-----------|
| Emission unit ID number: T-8461 | Emission unit name: E-8461 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Storage - PMPO Support System</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1951 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 37,000 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,600,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.36 | 0.04 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8466 | Emission unit name: E-8466 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Storage - PMPO Support System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1951 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
18,500 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,600,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.18 | 0.03 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8462 | Emission unit name: E-8462 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Storage - PMPO Support System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1951 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
37,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 235,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.9 | 0.01 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-112 | Emission unit name: E-112 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Storage - PMPO Support System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2007 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
28,000 gallons

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.35 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-70 | Emission unit name: E-70 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
204,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-71 | Emission unit name: E-71 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
204,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-72 | Emission unit name: E-72 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
204,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-73 | Emission unit name: E-73 . | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| | | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
204,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: T-74 | Emission unit name: E-74 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Final Product Storage - PMPO Storage and Ancillary Equipment</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1980 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp): 205,000 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-75 | Emission unit name: E-75 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
205,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-76 | Emission unit name: E-76 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Blending - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
8,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 240,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-77 | Emission unit name: E-77 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Blending - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
7,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 240,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.02 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|---|---|---|-----------|
| Emission unit ID number: T-78 | Emission unit name: E-78 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Polyol Blending - PMPO Storage and Ancillary Equipment</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 3,800 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,830,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? | |
| | | <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-79 | Emission unit name: E-79 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Blending - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
10,500 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 14,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.01 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|---|---|--|-----------|
| Emission unit ID number: T-80 | Emission unit name: E-80 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Final Product Storage - PMPO Storage and Ancillary Equipment</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1980 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 153,000 gallons | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| <p>Describe each fuel expected to be used during the term of the permit.</p> | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-81 | Emission unit name: E-81 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
105,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-82 | Emission unit name: E-82 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-83 | Emission unit name: E-83 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
28,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-84 | Emission unit name: E-84 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-85 | Emission unit name: E-85 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
28,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-86 | Emission unit name: E-86 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-87 | Emission unit name: E-87 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
28,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-88 | Emission unit name: E-88 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1980 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
156,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-89 | Emission unit name: E-89 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1980 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
156,000 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-90 | Emission unit name: E-90 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:

T-91

Emission unit name:

E-91

List any control devices associated with this emission unit:

Atm vent

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

Manufacturer:

Model number:

Serial number:

Construction date:
MM/DD/YYYY

Installation date:
MM/DD/YYYY
1979

Modification date(s):
MM/DD/YYYY

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
28,000 gal

Maximum Hourly Throughput:
N/A

Maximum Annual Throughput:
5,945,300 gal/yr

Maximum Operating Schedule:
24/7/365

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?

Indirect Fired Direct Fired

Maximum design heat input and/or maximum horsepower rating:

Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

NA

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-92 | Emission unit name: E-92 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
30,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-93 | Emission unit name: E-93 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
28,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,945,300 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-94 | Emission unit name: E-94 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1997 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
179,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.0 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-263 | Emission unit name: E-263 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
52,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,378,100 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.5 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|--|---|--|------------------|
| Emission unit ID number: T-264 | Emission unit name: E-264 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Final Product Storage - PMPO Storage and Ancillary Equipment</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp): 52,000 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,378,100 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.5 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-265 | Emission unit name: E-265 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
52,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,378,100 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.5 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-266 | Emission unit name: E-266 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
52,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,378,100 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0.1 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-275 | Emission unit name: E-275 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
19,700 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,189,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.03 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-277 | Emission unit name: E-277 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
19,700 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,189,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.03 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-278 | Emission unit name: E-278 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
21,700 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,189,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.03 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimates</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-681 | Emission unit name: E-681 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1960 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
48,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-682 | Emission unit name: E-682 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1960 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
48,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 & Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-685 | Emission unit name: E-685 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1960 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
48,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-688 | Emission unit name: E-688 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1960 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
48,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-695 | Emission unit name: E-695 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
280,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-696 | Emission unit name: E-696 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - PMPO Storage and Ancillary Equipment

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1990 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
280,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|---|------------------------------------|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|---|------------------------------------|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Acrylonitrile | 0.01 | 0.0005 |
| Styrene | 0.01 | 0.0005 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>API-42 and Engineering Estimate</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|--|---|--|------------------|
| Emission unit ID number: T-276 | Emission unit name: E-276 | List any control devices associated with this emission unit: Atm vent | |
| <p>Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)</p> <p>Polyol Starter - B103 #1 and #2 Feed System</p> | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 21,700 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,189,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| <p>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</p> | | | |
| <p>Describe each fuel expected to be used during the term of the permit.</p> | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 1.03 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

API-42 and Engineering Estimate

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-605 | Emission unit name: E-605 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B103 #1 and #2 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 303,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00035 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.45743 |
| Propionaldehyde | N/A | 0.00105 |
| Acetaldehyde | N/A | 0.002 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| <i>Emission Unit Description</i> | | | |
|--|---|--|-----------|
| Emission unit ID number: T-606 | Emission unit name: E-606 | List any control devices associated with this emission unit: Atm vent | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable) Polyol Starter - B103 #1 and #2 Feed System | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 12,400 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 303,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00035 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.45743 |
| Propionaldehyde | N/A | 0.00105 |
| Acetaldehyde | N/A | 0.002 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-661 | Emission unit name: E-661 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B103 #1 and #2 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1953 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
11,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 303,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|----------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.000345 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.47497 |
| Propionaldehyde | N/A | 0.00109 |
| Acetaldehyde | N/A | 0.00207 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-662 | Emission unit name: E-662 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B103 #1 and #2 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1953 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
11,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 303,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|----------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.000345 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.46181 |
| Propionaldehyde | N/A | 0.00106 |
| Acetaldehyde | N/A | 0.00202 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-628 | Emission unit name: E-628 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Propylene Glycol - B103 #1 and #2 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
11,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.001 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-659 | Emission unit name: E-659 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Glycerine - B103 #1 and #2 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1994 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
20,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,250,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|--------------------------------------|--|
| Emission unit ID number: C-3128 (B103 Reactor #1 Catalyst Addition System) | Emission unit name: E-3128 | List any control devices associated with this emission unit: K-5331 Dust Collector |
|--|--------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol Reactor System. A small quantity of solids are added to mixing vessel.

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable - dependent upon product mix, materials and control technology requirements.

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | 0.01 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Engineer's estimate, process knowledge

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

The particulate matter sources subject to the opacity requirements in 45CSR§7-3.1 are primarily due to manual addition of dry catalyst into a blending tank and are fugitive in nature, resulting from dumping the solids from bags. These solids are a small weight percent of the total tank contents. These emissions also occur for short durations on a limited basis which would make it impractical to conduct Method 9 opacity reading

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|--------------------------------------|--|
| Emission unit ID number: C-3228 (B103 Reactor #2 Catalyst Addition System) | Emission unit name: E-3228 | List any control devices associated with this emission unit: K-5331 Dust Collector |
|--|--------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol Reactor System. A small quantity of solids are added to mixing vessel.

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
Variable - dependent upon product mix, materials and control technology requirements.

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | 0.01 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineer's estimate, process knowledge</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

The particulate matter sources subject to the opacity requirements in 45CSR§7-3.1 are primarily due to manual addition of dry catalyst into a blending tank and are fugitive in nature, resulting from dumping the solids from bags. These solids are a small weight percent of the total tank contents. These emissions also occur for short durations on a limited basis which would make it impractical to conduct Method 9 opacity reading

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: B103 Reactor System (C-3101, C-3201 and C-3301) | Emission unit name: E-3101, E-3201, E-3301, E-3192, E-620 | List any control devices associated with this emission unit: Extended cook out (ECO) technology |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol Reactor System - B103, #1 and #2 Reaction Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
Variable - dependent upon product mix, materials and control technology requirements

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: <small>Polyether Polyol - 37,500 Tons/year Polyether Polyol Starter - 5,000 Tons/year Impact reactor polyether Polyol - 90,000 Tons/year</small> | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|------------------------------------|
| Maximum design heat input and/or maximum horsepower rating: N/A | Type and Btu/hr rating of burners: |
|--|------------------------------------|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 84 | 1.94 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 70 | 1.53 |
| Ethylene Oxide | 11 | 0.25 |
| Propionaldehyde | 1.0 | 0.05 |
| Acetaldehyde | 1.0 | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer modeling and reactor sampling</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Subpart PPP (R13-2561M, 8.1.11)
R13-2561M, 8.1.1
R13-2561M, 8.1.2



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 8.2.1
R13-2561M, 8.2.3
R13-2561M, 8.4.3
R13-2561M, 8.4.4
R13-2561M, 8.4.6
R13-2561M, 8.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-613 | Emission unit name: E-613 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 #1 and #2 Interim Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks -- gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,661,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0066 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.003 |
| Propionaldehyde | N/A | 0.0025 |
| Acetaldehyde | N/A | 0.00014 |
| Ethylene Oxide | N/A | 0.001 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-614 | Emission unit name: E-614 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 #1 and #2 Interim Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,661,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0067 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.003 |
| Propionaldehyde | N/A | 0.0025 |
| Acetaldehyde | N/A | 0.00014 |
| Ethylene Oxide | N/A | 0.001 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-667 | Emission unit name: E-667 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 #1 and #2 Interim Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1964 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,661,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0067 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.003 |
| Propionaldehyde | N/A | 0.0025 |
| Acetaldehyde | N/A | 0.00014 |
| Ethylene Oxide | N/A | 0.001 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-668 | Emission unit name: E-668 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 #1 and #2 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1964 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,661,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|---|------------------------------------|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|---|------------------------------------|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0066 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.003 |
| Propionaldehyde | N/A | 0.0025 |
| Acetaldehyde | N/A | 0.00014 |
| Ethylene Oxide | N/A | 0.001 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-643 | Emission unit name: E-643 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 #1 and #2 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1958 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,661,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0066 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.003 |
| Propionaldehyde | N/A | 0.0025 |
| Acetaldehyde | N/A | 0.00014 |
| Ethylene Oxide | N/A | 0.001 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-644 | Emission unit name: E-644 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 #1 and #2 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1958 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
15,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,661,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0066 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.003 |
| Propionaldehyde | N/A | 0.0025 |
| Acetaldehyde | N/A | 0.00014 |
| Ethylene Oxide | N/A | 0.001 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-103 | Emission unit name: E-103 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter or Crude Polyol - B103 Rx#3 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1989 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
37,859 gallons

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0023 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.005 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.003 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-647 | Emission unit name: E-647 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter or Crude Polyol - B103 Rx#3 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
13,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0013 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.06858 |
| Propionaldehyde | N/A | 0.00379 |
| Acetaldehyde | N/A | 0.00897 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-648 | Emission unit name: E-648 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter or Crude Polyol - B103 Rx #3 Feed System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
13,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0015 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.06858 |
| Propionaldehyde | N/A | 0.00379 |
| Acetaldehyde | N/A | 0.00897 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-269 | Emission unit name: E-268 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
50,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?
 Indirect Fired Direct Fired

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-674 | Emission unit name: E-674 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
98,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 700,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-273 | Emission unit name: E-273 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Glycerine - B103 Rx#3 Feed System related

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1963 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
8,300 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 63,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|--------------------------------------|---|
| Emission unit ID number: C-3328 (B103 Reactor #3 Catalyst Addition System) | Emission unit name: E-3328 | List any control devices associated with this emission unit: Atm vent |
|--|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol Reactor System - Rx#3 Feed System related. A small quantity of solids are added to mixing vessel.

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable - dependent upon product mix, material and control technology requirements.

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | 0.001 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 0 | 0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering estimate; process knowledge</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

The particulate matter sources subject to the opacity requirements in 45CSR 7-3.1 are primarily due to manual addition of dry catalyst into a blending tank and are fugitive in nature, resulting from dumping the solids from bags. These solids are a small weight percent of the total tank contents. These emissions also occur for short durations on a limited basis which would make it impractical to conduct Method 9 opacity reading.



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-6797 | Emission unit name: E-6797 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1994 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|------------------------------------|-------------------------------|--|
| Emission unit ID number: T-6799 | Emission unit name: E-6799 | List any control devices associated with this emission unit: Atm vent |
|------------------------------------|-------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - Storage Tank

| | | |
|----------------------------------|--|-------------------------------------|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1994 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,000 gal

| | | |
|-----------------------------------|--|---|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|--|---|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-611 | Emission unit name: E-611 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
13,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0016 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.06742 |
| Propionaldehyde | N/A | 0.00372 |
| Acetaldehyde | N/A | 0.00882 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-612 | Emission unit name: E-612 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,900 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0015 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.07223 |
| Propionaldehyde | N/A | 0.00399 |
| Acetaldehyde | N/A | 0.00945 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-669 | Emission unit name: E-669 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0015 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.07322 |
| Propionaldehyde | N/A | 0.00404 |
| Acetaldehyde | N/A | 0.00958 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-670 | Emission unit name: E-670 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Polyol - B103 Rx#3 Reactor Storage and Ancillary Equipment

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
13,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 5,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0015 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.0691 |
| Propionaldehyde | N/A | 0.00381 |
| Acetaldehyde | N/A | 0.00904 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-672 | Emission unit name: T-672 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Product - B103 Rx#3 Reactor Storage and Ancillary System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
98,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00036 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-259 | Emission unit name: E-259 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Product - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0016 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00312 |
| Propionaldehyde | N/A | 0.00469 |
| Acetaldehyde | N/A | 0.00466 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-255 | Emission unit name: E-255 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Product - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0016 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.0312 |
| Propionaldehyde | N/A | 0.00469 |
| Acetaldehyde | N/A | 0.00466 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8467 | Emission unit name: E-8467 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Product - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2007 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
51,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00238 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-8469 | Emission unit name: E-8469 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Product - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2008 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
51,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00238 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1519 | Emission unit name: E-1519 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Product - B103 Rx#3 Storage and Ancillary System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,300,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0015 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.03122 |
| Propionaldehyde | N/A | 0.0047 |
| Acetaldehyde | N/A | 0.00467 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1465 | Emission unit name: E-1465 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

New ISOP Feed (Common) common to #1, #2 and #5 - B103 Refining Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,750,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|---|------------------------------------|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|---|------------------------------------|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.2045 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propionaldehyde | N/A | 0.00123 |
| Acetaldehyde | N/A | 0.00062 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-656 | Emission unit name: E-656 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

ISOP Feed (Common) - B103 Refining System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1953 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,800 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,380,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.15578 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propionaldehyde | N/A | 0.00097 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|--------------------------------------|---|
| Emission unit ID number: T-658 | Emission unit name: E-658T | List any control devices associated with this emission unit: Atm vent |
|--|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

ISOP Feed (Common) - B103 Refining System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1953 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,800 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,380,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?
 Indirect Fired Direct Fired

Maximum design heat input and/or maximum horsepower rating: **Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.15578 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propionaldehyde | N/A | 0.00097 |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-610 | Emission unit name: E-610 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Sulfuric Acid (Common) - B103 IX & Refining System #1

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2006 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
5,200 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 45,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| Sulfuric Acid | N/A | 0.00015 |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|---|---|
| Emission unit ID number: C-3404 & C-3406; H-3477; C-3504 & C-3506; H-3577; C-3604 & C-3606; H-3677 - B103 Refining System | Emission unit name: E-662, E-608, E-663, E-609, E-664 and E-610 | List any control devices associated with this emission unit: Extended Cookout (ECO) Technology / None |
|---|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Crude Refining System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Variable - dependent upon product mix, materials and control technology requirements

| | | |
|---|--|--|
| Maximum Hourly Throughput: 12,000 lb/hr ISOP flush rate 18,000 lb/hr Product Feed Rate | Maximum Annual Throughput: N/A | Maximum Operating Schedule: 24/7/365 |
|---|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: N/A | Type and Btu/hr rating of burners: N/A |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

N/A

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 10.3 | 29.7 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 0.09 | 0.04 |
| Ethylene Oxide | 0 | 0 |
| Propionaldehyde | 0.09 | 0.33 |
| Acetaldehyde | 0.09 | 0.08 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculations and stack testing</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 21
R13-2561M, 8.1.3
R13-2561M, 8.1.4



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 8.2.2
R13-2561M, 8.4.4

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|-------------------------------------|---|
| Emission unit ID number: T-3478 | Emission unit name: E-608 | List any control devices associated with this emission unit: Atm vent |
|---|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Jet Seal Pot - B103 Refining System #1

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
133 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 380,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00127 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00002 |
| Propionaldehyde | N/A | 0.00001 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-3483 | Emission unit name: E-3483 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Jet Pot Collection - B103 Refining System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1965 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
130 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 760,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00247 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00009 |
| Propionaldehyde | N/A | 0.00003 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1466 | Emission unit name: E-1466 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used/Recovered ISOP (Common) - B103 Refining System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,800 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 4,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.199 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00076 |
| Propionaldehyde | N/A | 0.00089 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-649 | Emission unit name: E-649 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #1

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.12621 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-650 | Emission unit name: E-650 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #1

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,600 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.11621 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-604 | Emission unit name: E-604 | List any control devices associated with this emission unit: Atm vent steam jets for T-604, Can vent to E-603 |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #1

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| | | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
12,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.10805 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|-------------------------------------|---|
| Emission unit ID number: T-3578 | Emission unit name: E-609 | List any control devices associated with this emission unit: Atm vent |
|---|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Jet Seal Pot - B103 Refining System #2

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
133 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 380,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00127 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00002 |
| Propionaldehyde | N/A | 0.00001 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-261 | Emission unit name: E-261 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #2

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
13,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.1034 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-262 | Emission unit name: E-262 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #2

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
13,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.11178 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-257 | Emission unit name: E-257 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #2

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
13,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.1034 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-258 | Emission unit name: E-258 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B103 Refining System #2

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
13,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,800,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.1034 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|-------------------------------------|---|
| Emission unit ID number: T-3678 | Emission unit name: E-610 | List any control devices associated with this emission unit: Atm vent |
|---|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Jet Pot Seal - B103 Refining System #5

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
71 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 380,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.00123 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00001 |
| Propionaldehyde | N/A | 0.00001 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: T-603 | Emission unit name: E-603 or E-603S | List any control devices associated with this emission unit: Atm vent. Can vent to E-603S |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank Vacuum Jet - B103 Refining System #5

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
12,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.10805 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: T-645 | Emission unit name: E-645 or E-603S | List any control devices associated with this emission unit: Atm vent. Can vent to E-603S |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank Vacuum Jet - B103 Refining System #5

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1958 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.12621 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: T-646 | Emission unit name: E-646 or E-603S | List any control devices associated with this emission unit: Atm vent. Can vent to E-603S |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank Vacuum Jet - B103 Refining System #5

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
14,100 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 2,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.11621 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-267 | Emission unit name: E-267 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-268 | Emission unit name: E-268 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-269 | Emission unit name: E-268 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-270 | Emission unit name: E-270 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1961 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
49,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 700,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-271 | Emission unit name: E-271 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1964 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
30,300 gal

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-272 | Emission unit name: E-272 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1964 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
30,300 gal

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-673 | Emission unit name: E-673 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
97,400 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|--|--|---|-----------|
| Emission Unit Description | | | |
| Emission unit ID number: T-674 | Emission unit name: E-674 | List any control devices associated with this emission unit: Atm vent | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable) Product Storage - B103 Final Product Storage | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 98,500 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 700,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1517 | Emission unit name: E-1517 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2006 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1518 | Emission unit name: E-1518 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1966 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|---|------------------------------------|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|---|------------------------------------|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1520 | Emission unit name: E-1520 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
27,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1521 | Emission unit name: E-1521 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

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| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks -- gallons, boilers – MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1523 | Emission unit name: E-1523 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1524 | Emission unit name: E-1524 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1527 | Emission unit name: E-1527 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1528 | Emission unit name: E-1528 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1529 | Emission unit name: E-1529 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1530 | Emission unit name: E-1530 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1525 | Emission unit name: E-1525 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1531 | Emission unit name: E-1531 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1532 | Emission unit name: E-1532 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
50,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1522 | Emission unit name: E-1522 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2011 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
51,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-1526 | Emission unit name: E-1526 | List any control devices associated with this emission unit: Atm Vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B103 Final Product Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
51,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-1 | Emission unit name: E-1 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B196 Rx #7, #8 and #9 Feed and Vacuum Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 265,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-2 | Emission unit name: E-2 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B196 Rx #7, #8 and #9 Feed and Vacuum Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 265,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-9 | Emission unit name: E-9 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B196 Rx #7, #8 and #9 Feed and Vacuum Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
21,800 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,393,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0008 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-10 | Emission unit name: E-10 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter or Glycerine - B196 Rx #7, #8 and #9 Feed and Vacuum Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
21,800 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 1,393,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0645 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-18 | Emission unit name: E-18 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Starter - B196 Rx #7, #8 and #9 Feed and Vacuum Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
22,200 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 265,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: C-5201, C-5301 and C-5401 (B196 Reactor Systems) | Emission unit name: E-636, E-637, E-638, E-5216 and E-5416 | List any control devices associated with this emission unit: Extended cook out (ECO) technology |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Flex Polyol reactor system – B196 Rx #7, #8 and #9 Reaction System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 150,000 Tons per year | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 163.6 | 1.71 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 139.5 | 1.4 |
| Ethylene Oxide | 24.0 | 0.25 |
| Propionaldehyde | 0.04 | 0.04 |
| Acetaldehyde | 0.01 | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer model and reactor sampling</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Subpart PPP (R13-2561M, 8.1.11)
R13-2561M, 8.1.5
R13-2561M, 8.1.6



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 8.2.1
R13-2561M, 8.2.3
R13-2561M, 8.4.3
R13-2561M, 8.4.4
R13-2561M, 8.4.6
R13-2561M, 8.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-5316 | Emission unit name: E-5316 | List any control devices associated with this emission unit: |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Hot Well - common to Rx #7, #8 and #9 Reaction Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1993 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
80

| | | |
|-----------------------------------|---|------------------------------------|
| Maximum Hourly Throughput: | Maximum Annual Throughput: 5,000 gal/yr | Maximum Operating Schedule: |
|-----------------------------------|---|------------------------------------|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | | |
| Nitrogen Oxides (NO _x) | | |
| Lead (Pb) | | |
| Particulate Matter (PM _{2.5}) | | |
| Particulate Matter (PM ₁₀) | | |
| Total Particulate Matter (TSP) | | |
| Sulfur Dioxide (SO ₂) | | |
| Volatile Organic Compounds (VOC) | | 0.001 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---------------------------------------|---|
| Emission unit ID number: T-5340A | Emission unit name: E-5340A | List any control devices associated with this emission unit: Atm vent |
|--|---------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Liquid KOH - Reactors #7, #8 and #9 Reaction Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1982 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
4680 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Process knowledge</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---------------------------------------|---|
| Emission unit ID number: T-5340B | Emission unit name: E-5340B | List any control devices associated with this emission unit: Atm vent |
|--|---------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Liquid KOH - Rx #7, #8 and #9 Reaction Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1992 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
4680 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Process knowledge

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-3 | Emission unit name: E-3 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Storage - B196 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,300 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0026 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.001 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.0029 |
| Ethylene Oxide | N/A | 0.033 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-4 | Emission unit name: E-4 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Storage - B196 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,300 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0026 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.001 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.0029 |
| Ethylene Oxide | N/A | 0.033 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-5 | Emission unit name: E-5 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Storage - B196 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,300 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|---|------------------------------------|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|---|------------------------------------|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0026 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.001 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.0029 |
| Ethylene Oxide | N/A | 0.033 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-6 | Emission unit name: E-6 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Storage - B196 Interim Storage

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,300 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0026 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.001 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.0029 |
| Ethylene Oxide | N/A | 0.033 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-7 | Emission unit name: E-7 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Storage - B196 Interim Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
25,300 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0026 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.001 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.0029 |
| Ethylene Oxide | N/A | 0.033 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-----------------------------------|---|
| Emission unit ID number: T-8 | Emission unit name: E-8 | List any control devices associated with this emission unit: Atm vent |
|--|-----------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Crude Storage - B196 Interim Storage

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2003 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers -- MMBtu/hr, engines - hp):
25,300 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0026 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.001 |
| Propionaldehyde | N/A | 0.001 |
| Acetaldehyde | N/A | 0.0029 |
| Ethylene Oxide | N/A | 0.033 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-20 | Emission unit name: E-20 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Fresh ISOP - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 29,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 1.3846 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propionaldehyde | N/A | 0.00659 |
| Acetaldehyde | N/A | 0.0039 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-24 | Emission unit name: E-24 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Fresh ISOP - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 29,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 1.3846 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propionaldehyde | N/A | 0.00659 |
| Acetaldehyde | N/A | 0.0039 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-26 | Emission unit name: E-26 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Fresh ISOP - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1973 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 29,400,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 1.3846 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propionaldehyde | N/A | 0.00659 |
| Acetaldehyde | N/A | 0.0039 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-19 | Emission unit name: E-19 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used/Recovered ISOP - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 30,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 1.2312 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.0044 |
| Propionaldehyde | N/A | 0.00734 |
| Acetaldehyde | N/A | 0.01078 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-23 | Emission unit name: E-23 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used/Recovered ISOP - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1967 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 30,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 1.2312 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.0044 |
| Propionaldehyde | N/A | 0.00734 |
| Acetaldehyde | N/A | 0.01078 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-25 | Emission unit name: E-25 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Used/Recovered ISOP - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1973 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 30,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 1.2312 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.0044 |
| Propionaldehyde | N/A | 0.00735 |
| Acetaldehyde | N/A | 0.01078 |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|---|---|
| Emission unit ID number: C-5504, C-5506, C-5604, C-5606, C-5704, C-5706, C-5804 & C-5806 | Emission unit name: E-640, E-641, E-642, E-643, E-644 and E-645, E-5804 and E-5806 | List any control devices associated with this emission unit: Extended cookout (ECO) technology / None |
|---|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Polyol Crude Refining System - Reactors #7, #8, #9 and #10 Refining System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
 Variable – dependent upon product mix, materials and control technology requirements

| | | |
|---|--|--|
| Maximum Hourly Throughput: 80,000 lb/hr ISOP flush rate 60,000 lb/hr Product Feed Rate | Maximum Annual Throughput: N/A | Maximum Operating Schedule: 24/7/365 |
|---|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 109.1 | 48.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | 4.1 | 0.03 |
| Ethylene Oxide | 0 | 0 |
| Propionaldehyde | 4.4 | 0.52 |
| Acetaldehyde | 4.4 | 0.52 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculations and stack testing</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

WV Regulation 21
R13-2561M, 8.1.7
R13-2561M, 8.1.8
R13-2561M, 8.1.9

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 8.2.2
R13-2561M, 8.4.4

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-17 | Emission unit name: E-17 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

H2SO4 Storage - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
6,500 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 111,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| Sulfuric Acid | N/A | 0.00024 |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

| | | | |
|---|--|--|------------------|
| <i>Emission Unit Description</i> | | | |
| Emission unit ID number: T-5650 | Emission unit name: E-5650 | List any control devices associated with this emission unit: Atm vent | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable) #8 IX Surge Tank - B196 #7, #8, #9 and #10 Refining Systems | | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY | |
| Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp): 22,000 gal | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 13,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: | | Type and Btu/hr rating of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 4.74146 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00368 |
| Propionaldehyde | N/A | 0.01053 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> <p>EPA states that for tanks that are continuously being pumped into and out annual tank turnover rate = tank throughput / tank volume * avg change in liquid height / max liquid height = ratio indicating the breathing loss is 0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-5750 | Emission unit name: E-5750 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

#9 IX Surge Tank - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 13,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 4.74146 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00368 |
| Propionaldehyde | N/A | 0.01053 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> <p>EPA states that for tanks that are continuously being pumped into and out annual tank turnover rate = tank throughput / tank volume * avg change in liquid height / max liquid height = ratio indicating the breathing loss is 0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-5550 | Emission unit name: E-5550 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

#7 IX Surge Tank - B196 #7, #8, #9 and #10 Refining Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
22,000 gal

| | | |
|--|--|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 13,200,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|--|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 4.7416 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00368 |
| Propionaldehyde | N/A | 0.01053 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> <p>EPA states that for tanks that are continuously being pumped into and out annual tank turnover rate = tank throughput / tank volume * avg change in liquid height / max liquid height = ratio indicating the breathing loss is 0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|--|
| Emission unit ID number: H-242 | Emission unit name: E-242 | List any control devices associated with this emission unit: N/A |
|--|-------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

B196 #7 Evaporation Vacuum System - Reactors #7, #8, #9 and #10 Refining System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
Same as unit capacity

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.48 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.12 |
| Ethylene Oxide | N/A | 0 |
| Propionaldehyde | N/A | 0.41 |
| Acetaldehyde | N/A | 0.048 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer model and stack testing</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-5678 | Emission unit name: E-5678 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Jet Pot Seal - Reactor #7, #8 and #9 IX and Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1979 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
80 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 380,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0022 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.00013 |
| Propionaldehyde | N/A | 0.00001 |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-11 | Emission unit name: E-11 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.27189 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Tanks 4.0

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-12 | Emission unit name: E-12 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.27189 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A.



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|--|
| Emission unit ID number: H-230 | Emission unit name: E-230 | List any control devices associated with this emission unit: N/A |
|--|-------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

B196 #8 Evaporation Vacuum System - Reactors #7, #8, #9 and #10 Refining System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Same as unit capacity

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
N/A

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.48 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.12 |
| Ethylene Oxide | N/A | 0 |
| Propionaldehyde | N/A | 0.41 |
| Acetaldehyde | N/A | 0.048 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer model and stack testing</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-13 | Emission unit name: E-13 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.27189 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-14 | Emission unit name: E-14 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.27189 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|--|
| Emission unit ID number: H-267 | Emission unit name: E-267 | List any control devices associated with this emission unit: N/A |
|--|-------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

B196 #9 Evaporation Vacuum System - Reactors #7, #8, #9 and #10 Refining System

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

Same as unit capacity

| | | |
|--|-----------------------------------|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|--|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.48 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.12 |
| Ethylene Oxide | N/A | 0 |
| Propionaldehyde | N/A | 0.41 |
| Acetaldehyde | N/A | 0.048 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Material balance, engineering calculation utilizing computer model and stack testing</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-15 | Emission unit name: E-15 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|----------------------------|------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter' (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.27189 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-16 | Emission unit name: E-16 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Make Tank - B196 Rx #7, #8, #9 and #10 Refining Systems

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
26,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,900,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.27189 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-60 | Emission unit name: E-60 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tanks

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
270,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0068 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-61 | Emission unit name: E-61 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
280,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-62 | Emission unit name: E-62 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
143,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-63 | Emission unit name: E-63 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
143,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-64 | Emission unit name: E-64 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2002 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons, boilers - MMBtu/hr, engines - hp):
143,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-65 | Emission unit name: E-65 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

143,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-66 | Emission unit name: E-66 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1980 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks -- gallons, boilers -- MMBtu/hr, engines - hp):
203,000 gal/yr

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-67 | Emission unit name: E-67 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1980 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
203,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|------------------------------------|---|
| Emission unit ID number: T-68 | Emission unit name: E-68 | List any control devices associated with this emission unit: Atm vent |
|---|------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1974 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
266,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 6,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|-------------------------------------|---|
| Emission unit ID number: T-698 | Emission unit name: E-698 | List any control devices associated with this emission unit: Atm vent |
|--|-------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Final Product Storage - B196 Final Storage Tank

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 2004 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
280,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 8,000,000 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | 2.9 | 0.05 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Tanks 4.0</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|--------------------------------------|---|
| Emission unit ID number: T-6798 | Emission unit name: E-6798 | List any control devices associated with this emission unit: Atm vent |
|---|--------------------------------------|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Product Storage - B196 Final Storage Tank

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1994 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
50,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.005 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|-------------------------------------|--|
| Emission unit ID number: C5812 (Isopropanol Distillation Column System) | Emission unit name: E-639 | List any control devices associated with this emission unit: C5811 (Condenser) |
|---|-------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Multi-try distillation column with reboiler and preheater – ISOP Distillation Column System

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|-----------------------------------|-----------------------------------|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|---|---|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|--|---------------------|--------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.2402 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Propylene Oxide | N/A | 0.0005 |
| Ethylene Oxide | N/A | 0 |
| Propionaldehyde | N/A | 0.0091 |
| Acetaldehyde | N/A | 0.23 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Stack testing and engineering calculations</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|--|
| Emission unit ID number: Carbon Treater (C-2090) | Emission unit name: No Emission Point | List any control devices associated with this emission unit: Dow Boiler 26 or 27 |
|--|---|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Emissions are only generated when the carbon bed is regenerated

| | | |
|---|---|--|
| Manufacturer: Calgon | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1996 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|-----------------------------------|-----------------------------------|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|---|---|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

DOW utilized boiler emission factors for air emissions. Covestro provided air emissions to boiler based upon engineering calculations

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 7.1.1
R13-2561M, 7.1.2
R13-2561M, 7.1.3
R13-2561M, 7.1.5
WV Regulation 27
40 CFR Subpart PPP

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 7.2.1
R13-2561M, 7.4.3

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|---|--|
| Emission unit ID number: Carbon Treater (C-2090B) | Emission unit name: No emission point | List any control devices associated with this emission unit: DOW Boiler 26 or 27 |
|---|---|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Emissions are only generated when the carbon bed is regenerated

| | | |
|--------------------------------|----------------------|-----------------------|
| Manufacturer: Calgon | Model number: | Serial number: |
|--------------------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1997 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

| | | |
|-----------------------------------|-----------------------------------|--|
| Maximum Hourly Throughput: | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/365 |
|-----------------------------------|-----------------------------------|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>DOW utilized boiler emission factors for air emissions. Covestro provided air emissions to boiler based upon engineering calculations.</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2561M, 7.1.1
R13-2561M, 7.1.2
R13-2561M, 7.1.3
R13-2561M, 7.1.5
WV Regulation 27
40 CFR Subpart PPP

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R13-2561M, 7.2.1
R13-2561M, 7.4.3

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: C-101 | Emission unit name: No emission point | List any control devices associated with this emission unit: Vapor balanced |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PO Storage (South Sphere) - PO Distribution

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1942 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
168,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>N/A - No emission point</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--|---|---|
| Emission unit ID number: C-102 | Emission unit name: No emission point | List any control devices associated with this emission unit: Vapor Balanced |
|--|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PO Storage (North Sphere) - PO Distribution

| | | |
|----------------------|----------------------|-----------------------|
| Manufacturer: | Model number: | Serial number: |
|----------------------|----------------------|-----------------------|

| | | |
|---|---|--|
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1942 | Modification date(s): MM/DD/YYYY |
|---|---|--|

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
168,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>N/A - No emission point</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|---|---|
| Emission unit ID number: T-9016 | Emission unit name: No emission point | List any control devices associated with this emission unit: Vapor Balanced |
|---|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PO Storage (North Charleston Tank Farm) - PO Distribution

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1969 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
420,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>N/A - No emission point</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|---|---|---|
| Emission unit ID number: T-9017 | Emission unit name: No emission point | List any control devices associated with this emission unit: Vapor balanced |
|---|---|---|

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

PO Storage (North Charleston Tank Farm) - PO Distribution

| | | |
|---|---|--|
| Manufacturer: | Model number: | Serial number: |
| Construction date: MM/DD/YYYY | Installation date: MM/DD/YYYY 1959 | Modification date(s): MM/DD/YYYY |

Design Capacity (examples: furnaces - tons/hr, tanks -- gallons, boilers -- MMBtu/hr, engines - hp):
350,000 gal

| | | |
|--|---|--|
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: 0 gal/yr | Maximum Operating Schedule: 24/7/365 |
|--|---|--|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| N/A | | | |
| | | | |
| | | | |

| Emissions Data | | |
|---|---------------------|-----|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | N/A | N/A |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | 0.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | | |
| | | |
| | | |
| <p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>N/A - No emission point</p> | | |

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

N/A



Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

N/A

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

| | | |
|---|--|---|
| Control device ID number: Ex-2424 and H-2443 | List all emission units associated with this control device. PMPO #4 | |
| Manufacturer: | Model number: | Installation date: N/A |
| Type of Air Pollution Control Device: | | |
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input checked="" type="checkbox"/> X Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator | |
| List the pollutants for which this device is intended to control and the capture and control efficiencies. | | |
| Pollutant | Capture Efficiency | Control Efficiency |
| Acrylonitrile | 100% | 98.5% |
| Styrene | 100% | 98.5% |
| VOC's | 100% | 90+% |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bngs, size, temperatures, etc.). | | |
| Water cooled condenser and inner and aftercooler condensers associated with the steam ejector system. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> X No | | |
| If Yes, Complete ATTACHMENT H If No. Emission limitation of standard for which a WVDEP DAQ Title V permit specifies a continuous compliance determination method, as defined in 40 CFR§64.1 | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| <ul style="list-style-type: none"> Must vent to CTO when operating. This mode of operation only allowed when there is a period of malfunction or shutdown No vinylidene chloride can be present Jet condenser H-2443 exit vent temperature shall not exceed 150°C. Total vent time is not to exceed 720 hours in a calendar year. | | |

ATTACHMENT G - Air Pollution Control Device Form

| | | |
|--|---|-----------------------------------|
| Control device ID number: C-2044 | List all emission units associated with this control device. Wastewater from PMPO Jet Pots (T-2148, T-2248, T-2348 and T-2448), C-2016 (ACN Treater), Thermal Oxidizer (Y-2124) | |
| Manufacturer: | Model number: | Installation date: 2006 |

Type of Air Pollution Control Device:

| | | |
|---|---|--|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input checked="" type="checkbox"/> Other (describe) Steam stripper with dual flow trays _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator | |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

| Pollutant | Capture Efficiency | Control Efficiency |
|---------------|--------------------|--------------------|
| Acrylonitrile | 100% | Approximately 80+% |
| Styrene | 100% | 99% |
| | | |
| | | |

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Steam stripper

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No. Emission limitation of standard for which a WVDEP DAQ Title V permit specifies a continuous compliance determination method, as defined in 40 CFR§64.1

Describe the parameters monitored and/or methods used to indicate performance of this control device.

- Stripper steam to wastewater feed ratio
- Wastewater feed temperature
- Maximum wastewater feed rate

ATTACHMENT G - Air Pollution Control Device Form

| | |
|--|---|
| Control device ID number: C-2016 | List all emission units associated with this control device. Wastewater from PMPO Jet Pots (T-2148, T-2248, T-2348 and T-2448), Wastewater Stripper (C-2044) |
|--|---|

| | | |
|----------------------|----------------------|-----------------------------------|
| Manufacturer: | Model number: | Installation date: 1991 |
|----------------------|----------------------|-----------------------------------|

Type of Air Pollution Control Device:

| | | |
|---|--|--|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input checked="" type="checkbox"/> Other (describe) Plug flow reactor |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

| Pollutant | Capture Efficiency | Control Efficiency |
|---------------|--------------------|--------------------|
| Acrylonitrile | 100% | 99% |
| | | |
| | | |
| | | |

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Plug flow reactor that reacts sodium hydroxide with acrylonitrile.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No. Emission limitation of standard for which a WVDEP DAQ Title V permit specifies a continuous compliance determination method, as defined in 40 CFR§64.1

Describe the parameters monitored and/or methods used to indicate performance of this control device.

- Wastewater feed rate
- Caustic to wastewater feed ratio
- Acrylonitrile treater feed temperature

ATTACHMENT G - Air Pollution Control Device Form

| | | |
|---|--|-----------------------------------|
| Control device ID number: Y-2124 | List all emission units associated with this control device. PMPO#1 (H-2143, T-2148); PMPO#2 (H-2253, T-2248); PMPO#3 (H-2343, H-2353, T-2348); PMPO#4 (H-2443, T-2448, T-109); T-616, T-626, T-631, T-632, T-663, T-684, T-686, T-693, Switch Rack and Wastewater Stripper C-2044 | |
| Manufacturer: McGill Incorporated | Model number: Custom | Installation date: 1984 |

Type of Air Pollution Control Device:

| | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input checked="" type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

| Pollutant | Capture Efficiency | Control Efficiency |
|------------------|--------------------|--------------------|
| Acrylonitrile | 100% | 99% |
| Benzene | 100% | 99% |
| Ethylene Benzene | 100% | 99% |
| Xylene | 100% | 99% |
| VOC's | 100% | 99% |
| | | |
| | | |

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Incineration device that relies upon natural gas and waste gas feed to maintain destruction temperature. Minimum residence time is determined by inlet waste gas flow.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No
If Yes, Complete ATTACHMENT H
If No, Emission limitation of standard for which a WVDEP DAQ Title V permit specifies a continuous compliance determination method, as defined in 40 CFR§64.1

Describe the parameters monitored and/or methods used to indicate performance of this control device.

- 1) Combustion chamber temperature
- 2) Flow rate of waste gas into the thermal oxidizer

| ATTACHMENT G - Air Pollution Control Device Form | | |
|---|---|----------------------------------|
| Control device ID number: D-2124A | List all emission units associated with this control device. Y-2124 (Thermal oxidizer – exit gas of CTO goes to this scrubber) | |
| Manufacturer: Ceilcote | Model number: | Installation date: MM/DD/YYYY |
| Type of Air Pollution Control Device: <input type="checkbox"/> Baghouse/Fabric Filter <input type="checkbox"/> Venturi Scrubber <input type="checkbox"/> Multiclone <input type="checkbox"/> Carbon Bed Adsorber <input checked="" type="checkbox"/> Packed Tower Scrubber <input type="checkbox"/> Single Cyclone <input type="checkbox"/> Carbon Drum(s) <input type="checkbox"/> Other Wet Scrubber <input type="checkbox"/> Cyclone Bank <input type="checkbox"/> Catalytic Incinerator <input type="checkbox"/> Condenser <input type="checkbox"/> Settling Chamber <input type="checkbox"/> Thermal Incinerator <input type="checkbox"/> Flare <input type="checkbox"/> Other (describe) _____ <input type="checkbox"/> Wet Plate Electrostatic Precipitator <input type="checkbox"/> Dry Plate Electrostatic Precipitator | | |
| List the pollutants for which this device is intended to control and the capture and control efficiencies. | | |
| Pollutant | Capture Efficiency | Control Efficiency |
| Chlorine | 100% | 99.8% |
| Hydrogen chloride | 100% | 99.8% |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Minimum liquor flow rate to scrubber | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Complete ATTACHMENT H If No. Emission limitation of standard for which a WYDEP DAQ Title V permit specifies a continuous compliance determination method, as defined in 40 CFR§64.1 | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. 1) Liquor flow rate to scrubber 2) Caustic flow required | | |

Suggested Title V
Draft Permit Language

West Virginia Department of Environmental Protection

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

⊛ Note: Only the
pages that need
revised are
included in this
Attachment



Pursuant to
Title V
of the Clean Air Act

Issued to:
Covestro LLC
South Charleston Plant
R30-03900102-2017

William F. Durham
Director

Issued: October 6, 2017 • Effective: October 20, 2017
Expiration: October 6, 2022 • Renewal Application Due: April 6, 2022

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|---|-------------------|-------------------------------|-------------------------|-----------------|--|
| POLYMER POLYOLS EMISSION GROUPS (PMPO) | | | | | |
| PMPO #1 | | | | | |
| T-1459 | E-1459 | Catalyst/Flex Storage | 1965 | 15,900 gal | atm vent |
| T-1460 | E-1460 | Catalyst/Flex Storage | 1965 | 15,900 gal | atm vent |
| Ex-2134 | NA | Condenser | N/A | N/A | Vents to H-2143 Vacuum Jet |
| H-2143 | E-655 | Vacuum Jets | 1984 | N/A | Vents to T.O. Y-2124 or 651 emergency bypass |
| T-2148 | E-655 | Jet Pot Decanter | N/A | N/A | vents to T.O. Y-2124 |
| T-2148 | E-651 | Jet Pot Decanter | N/A | N/A | emergency vent |
| PMPO#1 | E-651 | PMPO #1 Jets | N/A | N/A | H-2143 |
| T-1454 | E-1454 | Intermediate or make tank | 1965 | 15,700 gal | atm vent |
| T-1455 | E-1455 | Intermediate or make tank | 1967 | 15,700 gal | atm vent |
| T-1456 | E-1456 | Intermediate or make tank | 1967 | 15,700 gal | atm vent |
| T-1458 | E-1458 | Intermediate or Make Tank | 1960 | 28,000 gal | atm vent |
| T-2165 | E-2165 | Additive tank for BHT or PDDP | N/A | 660 gal | atm vent |
| T-2265 | E-2166 | Additive tank | N/A | 660 gal | atm vent |
| T-2305 | E-2305 | Cat mix Tank | 2003 | 530 gal | atm vent |
| PMPO #2 | | | | | |
| Ex-2224 | NA | Condenser | N/A | | Vents to H-2253 Vacuum Jet |
| H-2253 | E-655 | Vacuum Jets | N/A | | Vents to T.O. Y-2124 or E-653 emergency bypass |
| T-2248 | E-655 | Jet Pot Decanter | 1994 | N/A | vents to T.O. Y-2124 |
| T-2248 | E-653 | Jet Pot Decanter | N/A | N/A | emergency vent |
| PMPO #2 | E-653 | PMPO #2 Jets | N/A | N/A | Ex-2224 H-2253 |
| T-1453 | E-1453 | Intermediate or make tank | 1965 | 15,000 gal | atm vent |
| T-1463 | E-1463 | Intermediate or make tank | 1974 | 14,000 gal | atm vent |
| T-1464 | E-1464 | Intermediate or make tank | 1974 | 15,000 gal | atm vent |
| PMPO #3 | | | | | |
| Ex-2324 | NA | Condenser | N/A | | Vents to H-2343 Vacuum Jet |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|------------------|-------------------|--|--------------------------|-----------------|--|
| H-2343 | E-655 | Vacuum Jets | N/A | | Vents to T.O. Y-2124 or E-652 emergency bypass |
| T-2348 | E-655 | Jet Pot Decanter | 1992 | 1,500 gal | vents to T.O. Y-2124 |
| T-2348 | E-652/ E-654 | Jet Pot Decanter | 1992 | 1,500 gal | emergency vent |
| PMPO #3 | E-652/ E-654 | PMPO #3 Jets | N/A | N/A | Ex-2324 H-2343 H-2253 |
| H-2353 | E-655 | 2 nd Stage Vacuum Jets | N/A | | vents to T.O. Y-2124 or E-654 emergency bypass |
| T-8480 | E-8480 | Intermediate or make tank | 1963 | 28,000 gal | atm vent |
| T-8481 | E-8481 | Intermediate or make tank | 1963 | 28,000 gal | atm vent |
| T-8482 | E-8482 | Intermediate or make tank | 1991 | 28,000 gal | atm vent |
| T-8483 | E-8483 | Intermediate or make tank | 1991 | 28,000 gal | atm vent |
| T-631 | E-655 | Recovered alcohol (feed tank for PFS) Receives from PMPO #1, 2&3 and feeds PFS. | 1966 | 32,000 gal | vents to T.O. Y-2124 |
| PMPO #4 | | | | | |
| Ex-2424 | NA | Condenser | N/A | | Vents to H-2443 Vacuum Jet |
| H-2443 | E-655 | Vacuum Jets | N/A | | Vent to T.O. E-655 Y-2124 |
| T-103 | E-103 | Storage | 1990 | 17,000 gal | atm vent |
| T-2448 | E-655 | Jet Pot Decanter | 1990 | N/A | vents to T.O. Y-2124 |
| T-2448 | E-658 | Jet Pot Decanter | N/A | N/A | emergency vent |
| PMPO #4 | E-658 | PMPO #4 Jets | N/A | N/A | Ex-2424 H-2443 |
| T-105 | E-105 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-106 | E-106 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-107 | E-107 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-108 | E-108 | Intermediate or make tank | 1962 | 27,000 gal | atm vent |
| T-8484 | E-8484 | Intermediate or make tank | 1962 | 30,000 gal | atm vent |
| T-8485 | E-8485 | Intermediate or make tank | 1962 | 30,000 gal | atm vent |
| T-2465 | E-2465 | Cooling Brine | 1990 | N/A | atm vent |
| T-2496 | E-2496 | Hot oil system for evaporator | 1990 | 400 gal | atm vent |
| T-109 | E-655 | Recycled alcohol (feed tank for PFS) | 1954 | 21,000 gal | Vents to T.O. Y-2124 |

Move to RY 113 Feed System Retained (P98)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------------|-------------------------|--------------------------|----------------------|
| Y-2124 | E-655 | Thermal Oxidizer (TO) | 1984 | 512 ft ³ /min | APCD |
| T-616 | E-655 | Storage/decanting of wastewater | 2010 | 32,000 gal | Vents to T.O. Y-2124 |
| T-1462 | E-1462 | Storage (stabilizer) | 1965 | 15,000 gal | atm vent |
| T-1467 | E-1467 | Storage (Polyol) | 1974 | 30,000 gal | atm vent |
| T-1468 | E-1468 | Storage (Polyol) | 1974 | 30,000 gal | atm vent |
| T-693 | E-655 | Waste monomer tank | 2001 | 16,200 gal | vent to T.O. Y-2124 |
| T-8464 | E-8464 | Rx vessel/blending | 1951 | 18,500 gal | atm vent |
| T-8461 | E-8461 | Storage | 1951 | 37,000 gal | atm vent |
| T-8466 | E-8466 | Storage | 1951 | 18,500 gal | atm vent |
| T-8462 | E-8462 | Storage | 1951 | 37,000 gal | atm vent |
| T-112 | E-112 | Isopropanol | 2007 | 28,000 gal | atm vent |

Storage and Ancillary System

| | | | | | |
|-------|-------|-----------------------|------------------|-------------|----------|
| T-70 | E-70 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-71 | E-71 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-72 | E-72 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-73 | E-73 | Final Product Storage | 1979 | 204,000 gal | atm vent |
| T-74 | E-74 | Final Product Storage | 1980 | 205,000 gal | atm vent |
| T-75 | E-75 | Final Product Storage | 1979 | 205,000 gal | atm vent |
| T-76 | E-76 | Polyol blending | 1990 | 8,400 gal | atm vent |
| T-77 | E-77 | Polyol blending | 1990 | 7,100 gal | atm vent |
| T-78 | E-78 | Polyol blending | 1990 | 3,800 gal | atm vent |
| T-79 | E-79 | Polyol blending | 1990 | 10,500 gal | atm vent |
| T-80 | E-80 | Final Product Storage | 1980 | 153,000 gal | atm vent |
| T-81 | E-81 | Final Product Storage | 1979 | 105,000 gal | atm vent |
| T-82 | E-82 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-83 | E-83 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-84 | E-84 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-85 | E-85 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-86 | E-86 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-87 | E-87 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-88 | E-88 | Final Product Storage | 1980 | 156,000 gal | atm vent |
| T-89 | E-89 | Final Product Storage | 1980 | 156,000 gal | atm vent |
| T-90 | E-90 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-91 | E-91 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-92 | E-92 | Final Product Storage | 1979 | 30,000 gal | atm vent |
| T-93 | E-93 | Final Product Storage | 1979 | 28,000 gal | atm vent |
| T-94 | E-94 | Final Product Storage | 1997 | 179,000 gal | atm vent |
| T-263 | E-263 | Final Product Storage | 1961 | 52,000 gal | atm vent |
| T-264 | E-264 | Final Product Storage | 1961 | 52,000 gal | atm vent |
| T-265 | E-265 | Final Product Storage | 1961 | 52,000 gal | atm vent |
| T-266 | E-266 | Final Product Storage | 2002 | 52,000 gal | atm vent |
| T-271 | E-271 | Final Product Storage | 1964 <i>2020</i> | 30,300 gal | atm vent |
| T-272 | E-272 | Final Product Storage | 1964 <i>2020</i> | 30,300 gal | atm vent |
| T-275 | E-275 | Final Product Storage | 1967 | 19,700 gal | atm vent |

Move to B-10-3 Final Product Storage (pg 11)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|--------------------------|-----------------|----------------|
| T-277 | E-277 | Final Product Storage | 1967 | 19,700 gal | atm vent |
| T-278 | E-278 | Final Product Storage | 1967 | 21,700 gal | atm vent |
| T-681 | E-681 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-682 | E-682 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-685 | E-685 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-688 | E-688 | Final Product Storage | 1960 | 48,000 gal | atm vent |
| T-695 | E-695 | Out of PMPO service | 2003 | 280,000 gal | atm vent |
| T-696 | E-696 | Final Product Storage | 1990 | 280,000 gal | atm vent |

FLEXIBLE POLYOLS EMISSION GROUP

B103

#1 and #2 Feed System

| | | | | | |
|-----------------------------|------------------------------|--|------|------------|-----------------|
| T-276 | E-276 | Polyol starter | 1967 | 21,700 gal | atm vent |
| T-605 | E-605 | Polyol starter | 1959 | 12,400 gal | atm vent |
| T-606 | E-606 | Polyol starter | 1959 | 12,400 gal | atm vent |
| T-661 | E-661T | Polyol starter | 1953 | 11,000 gal | atm vent |
| T-662 | E-662T | Polyol starter | 1953 | 11,000 gal | atm vent |
| T-628 | E-628 | Propylene Glycol | 2002 | 11,000 gal | atm vent |
| T-659 | E-659T | Glycerin | 1994 | 20,000 gal | atm vent |
| C-3128 | E-3128 | Catalyst addition system (Rx #1) | 2003 | 105 gal | atm vent |
| C-3228 | E-3228 | Catalyst addition system (Rx #2) | N/A | 105 gal | atm vent |
| Y-3100 K-5531 | E-3100 E-5228A | Dust Collection (common) for RX #1, #2, and #3 | 2010 | N/A | atm vent (dust) |

#1 and #2 Reaction System

| | | | | | |
|--------|--------|--|------|------------|---|
| C-3101 | E-3101 | Reactor Rx #1 | 1963 | 13,900 gal | vent to vacuum hogging jets H-3192 |
| C-3201 | E-3201 | Reactor Rx #2 | 1950 | 14,280 gal | vent to vacuum hogging jets H-3192 |
| H-3192 | E-3192 | Hogging Vacuum Jets for #1 and #2 Reactors | N/A | | Atm vent (receives flow from #1 and #2) |

#1 and #2 Interim Storage

| | | | | | |
|-------|--------|--------------|------|------------|----------|
| T-613 | E-613 | Crude Polyol | 1959 | 15,000 gal | atm vent |
| T-614 | E-614 | Crude Polyol | 1959 | 15,000 gal | atm vent |
| T-667 | E-667 | Crude Polyol | 1967 | 15,000 gal | atm vent |
| T-668 | E-668 | Crude Polyol | 1967 | 15,000 gal | atm vent |
| T-643 | E-643T | Crude Polyol | 1958 | 15,000 gal | atm vent |
| T-644 | E-644T | Crude Polyol | 1958 | 15,000 gal | atm vent |

Rx #3 Feed System Related

| | | | | | |
|-------|-------|--------------------------------|------|------------|----------|
| T-647 | E-647 | Polyol starter or crude Polyol | 1959 | 13,100 gal | atm vent |
| T-648 | E-648 | Polyol starter or crude Polyol | 1959 | 13,100 gal | atm vent |
| T-703 | E-703 | Polyol starter or crude Polyol | 2019 | 38,000 gal | atm vent |

Move to
 B-103
 Final
 Product
 Storage
 (p11)

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|--------------------------|-----------------|-----------------|
| T-1522 | E-1522 | Polyol starter | 2014-2020 | 54,000 gal | atm vent |
| T-273 | E-273 | Glycerine | 1963 | 8,300 gal | atm vent |
| C-3328 | E-3328 | Catalyst addition system | N/A | 105 gal | atm vent |
| K-5331 | E-3100 | Dust Collection (Common) | N/A | | atm vent (dust) |

#3 Reaction System

| | | | | | |
|--------|--------|--------------------------|------|--|---|
| C-3301 | E-3301 | Reactor Rx #3 | 1928 | | Can vent to Vacuum Pump and Jets H-3316 as well |
| H-3316 | E-620 | Vacuum system #3 reactor | N/A | | atm vent |

Rx #3 Storage & Ancillary System

| | | | | | |
|--------|--------|------------------------|-----------|-------------|--|
| T-611 | E-611 | Intermediate Polyol | 1959 | 14,100 gal | atm vent |
| T-612 | E-612 | Intermediate Polyol | 1959 | 14,100 gal | atm vent |
| T-611 | E-620 | Crude Polyol Stripping | 2006 | 14,100 gal | Steam jets for T-611, T-612 and Rx #3. Vents to H-3316 |
| T-612 | E-610 | Crude Polyol Stripping | 2006 | 14,100 gal | Steam jets for T-611, T-612 and Rx #3. Vents to H-3316 |
| T-669 | E-669 | Polyol Product | 1967 | 14,100 gal | atm vent |
| T-670 | E-670 | Polyol Product | 1967 | 14,100 gal | atm vent |
| T-672 | E-672 | Polyol Product | 2004 | 100,000 gal | atm vent |
| T-259 | E-259 | Polyol Product | 1961 | 27,500 gal | atm vent |
| T-255 | E-255 | Polyol Product | 1967 | 27,500 gal | atm vent |
| T-1526 | E-1526 | Polyol Product | 1967-2020 | 51,200 gal | atm vent |
| T-8467 | E-8467 | Polyol Product | 2007 | 51,200 gal | atm vent |
| T-8469 | E-8469 | Polyol Product | 2008 | 51,200 gal | atm vent |
| T-1519 | E-1519 | Polyol Product | 1967 | 26,000 gal | atm vent |

Move to
 B-103
 Final
 Product
 Storage
 (p11)

Refining System

#1 System

| | | | | | |
|------------------|--------|--|------|------------|-------------------|
| T-1465 | E-1465 | New ISOP feed (Common). Common to #1, 2 & 5 systems | 2003 | 14,000 gal | atm vent |
| T-656 | E-656 | ISOP Feed (Common) | 1953 | 14,800 gal | Atm vent |
| T-658 | E-658T | ISOP Feed (Common) | 1953 | 14,800 gal | Atm vent |
| T-610 | E-610S | Sulfuric acid (Common) | 2006 | 5,200 gal | Atm vent |
| C-3404 | E-662 | Cat Bed - Catalyst removal | 1996 | N/A | atm vent |
| C-3406 | E-662 | Mix Bed - Catalyst removal | 1995 | 900 gal | atm vent |
| Ex-3475 / H-3477 | E-608 | Vacuum system (evaporation equipment) Condenser / Vacuum Jet off evaporators | N/A | | Ex-3475 condenser |
| T-3478 | E-608 | Jet seal pot | | 170 gal | atm vent |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|-------------------------|-----------------|--|
| T-645 | E-645 | Crude Polyol | 1958 | 14,100 gal | atm vent |
| T-646 | E-603S | Crude Polyol Stripping | 1958 | 14,100 gal | Steam jets for T-604, T-603, T-649 and T-650. Vent to 600 Series Vacuum Jets. |

B103 Final Product Storage

Add
 (1) T-271
 & T-272
 (from pg 7)
 (2) T-1522
 (from pg 9)
 (3) T-1526
 (from pg 9)
 and
 (4) T-6797
 &
 (5) T-6798
 (from pg 11)

| | | | | | |
|--------|--------|---------------------------|------|-------------|----------|
| T-267 | E-267 | Product storage | 1961 | 50,400 gal | atm vent |
| T-268 | E-268 | Product storage | 1961 | 50,400 gal | atm vent |
| T-269 | E-269 | Product storage & starter | 1961 | 50,000 gal | atm vent |
| T-270 | E-270 | Product storage | 1961 | 50,400 gal | atm vent |
| T-673 | E-673 | Product storage | 2004 | 100,000 gal | atm vent |
| T-674 | E-674 | Product storage | 2004 | 100,000 gal | atm vent |
| T-1517 | E-1517 | Product storage | 2006 | 27,500 gal | atm vent |
| T-1518 | E-1518 | Product storage | 1966 | 27,000 gal | atm vent |
| T-1520 | E-1520 | Product storage | 1967 | 27,000 gal | atm vent |
| T-1521 | E-1521 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1523 | E-1523 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1524 | E-1524 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1527 | E-1527 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1528 | E-1528 | Product storage | 2004 | 50,500 gal | atm vent |
| T-1529 | E-1529 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1530 | E-1530 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1525 | E-1525 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1531 | E-1531 | Product storage | 1967 | 50,500 gal | atm vent |
| T-1532 | E-1532 | Product storage | 1967 | 50,500 gal | atm vent |

B196 Phase IV

Rx #7, #8 and #9 Feed and Vacuum System

| | | | | | |
|--------|-----------|----------------------------|------|------------|--------------------------|
| T-1 | E-1 | Polyol starter | 2004 | 25,200 gal | atm vent |
| T-2 | E-2 | Polyol starter | 2004 | 25,200 gal | atm vent |
| T-9 | E-9 | Polyol starter | 1967 | 23,000 gal | atm vent |
| T-10 | E-10 | Polyol starter or glycerin | 1967 | 21,800 gal | atm vent |
| T-18 | E-18 | Polyol starter | 1974 | 22,200 gal | atm vent |
| H-5416 | E-5416 or | Vacuum Jets | N/A | | Receives flow from #7, 8 |
| H-5216 | E-5216 | Vacuum Pump | | | & 9. |

Rx #7, #8 and #9 Reaction System

| | | | | | |
|--------|--------|-------------------|------|------------|---|
| C-5201 | E-636 | #7 Reactor | 1974 | 22,300 gal | Can vent to Vacuum Jets H-5416 and H-5216 vacuum pump as well |
| T-5316 | E-5316 | Hot well (Common) | | 80 gal | atm vent |
| C-5301 | E-637 | #8 Reactor | 1974 | 19,400 gal | Can vent to Vacuum Jets H-5416 and H-5216 vacuum pump as well |
| C-5401 | E-638 | #9 Reactor | 1974 | 61,830 gal | Can vent to Vacuum Jets H-5416 and H-5216 vacuum pump as well |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/ Modified | Design Capacity | Control Device |
|-------------------------------------|-------------------|--|--------------------------|-----------------|-------------------------|
| T-16 | E-16 | Make tank | 1974 | 26,000 gal | atm vent |
| C-5804 | E-5804 | #10 Cat Bed -- Catalyst removal | 2004 | 9,600 gal | atm vent |
| C-5806 | E-5806 | #10 Mix Bed -- Catalyst removal | 2004 | 4,000 gal | atm vent |
| B196 Final Storage Tanks | | | | | |
| T-60 | E-60 | Product storage | 1974 | 270,000 gal | atm vent |
| T-61 | E-61 | Product storage | 1974 | 280,000 gal | atm vent |
| T-62 | E-62 | Product storage | 1974 | 143,000 gal | atm vent |
| T-63 | E-63 | Product storage | 2002 | 143,000 gal | atm vent |
| T-64 | E-64 | Product storage | 2002 | 143,000 gal | atm vent |
| T-65 | E-65 | Product storage | 1974 | 143,000 gal | atm vent |
| T-66 | E-66 | Product storage | 1980 | 203,000 gal | atm vent |
| T-67 | E-67 | Product storage | 1980 | 203,000 gal | atm vent |
| T-68 | E-68 | Product storage | 1974 | 266,000 gal | atm vent |
| T-698 | E-698 | Product Storage | 2004 | 280,000 gal | atm vent |
| T-6797 | E-6797 | Intermediate storage | 1994 | 50,000 gal | atm vent |
| T-6798 | E-6798 | Product storage | 1994 | 50,000 gal | atm vent |
| T-6799 | E-6799 | Intermediate storage | 1994 | 50,000 gal | atm vent |
| Distillation Column | | | | | |
| C-5812/ C-5811 Column / Condenser | E-639 | ISOP Distillation Column System | 1961 | 4,980 gallons | atm vent |
| Supply Chain PO Distribution | | | | | |
| PO Distribution | | | | | |
| C-2090 | None | Carbon Treater (Normal Operation) | 1996 | 2,730 gal | None |
| | E-25, E-26 & E-27 | Carbon Treater (Activation/Deactivation) Vents to Boiler | | | DOW Boiler 25, 26 or 27 |
| C-2090B | None | Carbon Treater (Normal Operation) | 1997 | 2,730 gal | None |
| | E-25, E-26 & E-27 | Carbon Treater (Activation/Deactivation) Vents to Boiler | | | DOW Boiler 25, 26 or 27 |
| C-101 | N/A | PO Storage (South Sphere) | 1942 | 168,000 gal | Vapor balanced |
| C-102 | N/A | PO Storage (North Sphere) | 1942 | 168,000 gal | Vapor balanced |
| T-9016 | N/A | PO Storage (North Charleston Tank Farm) | 1969 | 420,000 gal | Vapor balanced |
| T-9017 | N/A | PO Storage (North Charleston Tank Farm) | 1959 | 350,000 gal | Vapor balanced |
| EO Distribution | | | | | |
| C-7000 | Fugitive | EO Storage Tank | 2015* | 82,000 gal | Vapor Balanced |
| Y-7101 | E-7101 | EO Scrubber | 2015* | N/A | Y-7101 |
| D-7102 | E-7101 | EO Reaction Tank | 2015* | 4,400 gal | Y-7101 |
| D-7103 | E-7101 | EO Reaction Tank | 2015* | 4,400 gal | Y-7101 |
| C-7203 | E-7203 | Chiller Tank | 2015* | 640 gal | atm vent |

Move to B103 Final Product Silo (all)

Remove B-25 & E-27

Equip. Not installed

Not installed

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed/Modified | Design Capacity | Control Device |
|------------------|-------------------|---------------------------|-------------------------|-----------------|----------------|
| V-7200 | None | Chiller | 2015* | N/A | N/A |

* The installation date for the EO Distribution emission units is for underlying NSR permit, but the equipment has not been installed as of the date of issuance of this renewal Title V operating permit.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|---------------|------------------|
| R13-2561M | 10/15/2020 |

6.0 PMPO Storage Tanks and Loading Racks (Storage tanks and loading racks listed within Section 1.0)

6.1. Limitations and Standards

6.1.1. The Final Product Storage Tanks listed in Table 6.1.1. shall not exceed a maximum total combined annual throughput of 45,000,000 gallons per year.

Table 6.1.1.

| Final Product Storage Tanks (Tank IDs) | | |
|---|-------|-------|
| T-70 | T-87 | T-272 |
| T-71 | T-88 | T-275 |
| T-72 | T-89 | T-277 |
| T-73 | T-90 | T-278 |
| T-74 | T-91 | T-681 |
| T-75 | T-92 | T-682 |
| T-80 | T-93 | T-685 |
| T-81 | T-94 | T-688 |
| T-82 | T-263 | T-696 |
| T-83 | T-264 | |
| T-84 | T-265 | |
| T-85 | T-266 | |
| T-86 | T-271 | |

*Remove T-271 & T-272
 from this section.
 Moved to B103 Final
 Product Storage Tanks
 (pgs 9 & 12)*

[45CSR13 - R13-2561, Condition 6.1.1]

6.1.2. The Styrene Storage Tanks shall not exceed the maximum annual throughput rate and the maximum total combined annual styrene emissions limit identified in Table 6.1.2. of this permit.

Table 6.1.2.

| Styrene Storage Tanks ID | Emission Point ID | Total Styrene Throughput (gallons/year) | Total Annual Styrene Emissions (pounds/year) |
|--------------------------|-------------------|---|--|
| T-633 | E-633 | 13,400,000 | 1,600 |
| T-634 | E-634 | | |
| T-683 | E-683 | 13,400,000 | |
| T-687 | E-687 | | |

[45CSR13 - R13-2561, Condition 6.1.2]

7.0 Propylene Oxide Carbon Filtration Media Regeneration Operations Equipment ID (C-2090, C-2090B, Dow Boilers ~~B-25~~, B-26, and B27)

7.1. Limitations and Standards

7.1.1. All gaseous waste and off-gas generated during the activation/de-activation process associated with the carbon treater/propylene oxide filter system (C-2090 or C-2090B) shall be captured and transferred off-site to the Dow Powerhouse for thermal oxidation in ~~Boiler No. 25 [B-25]~~; Boiler No. 26 [B-26] and/or Boiler No. 27 [B-27], and released to atmosphere through emission points ~~E-25~~, E-26 and E-27, respectively. [45CSR13 - R13-2561, Condition 7.1.1., Equipment ID (C-2090, C-2090B)]

7.1.2. The vent line from the carbon treater to boilers ~~B-25~~, B-26 and B-27 shall be equipped with a flow meter and digital control system designed for the purpose of measuring the maximum hourly and total annual flow of propylene oxide vented to the boilers for destruction. [45CSR13 - R13-2561, Condition 7.1.2., Equipment ID (C-2090, C-2090B)]

7.1.3. The maximum propylene oxide emissions transferred from the activation/de-activation process to boilers ~~B-25~~, B-26 and B-27 shall not exceed 2,000 pounds per hour and 88.0 tons per 12-month rolling total. A twelve month rolling total shall mean the sum of the monthly totals at any given time during the previous twelve (12) consecutive calendar months.

The maximum annual propylene oxide boiler feed rate is based on the following conditions: 1) Boiler 25 (B-25) is a coal boiler and is currently out of service; 2) Boiler 26 (B-26) is a gas-fired boiler and has a maximum PO discharge rate to the atmosphere of 0.60 ton/yr per permit R13-2033 and a 98% PO destruction efficiency per DOW; and 3) Boiler 27 (B-27) is a gas-fired boiler and has a maximum PO discharge rate of 0.58 ton/yr to the atmosphere per permit R13-2141 and a 99% PO destruction efficiency per DOW.

[45CSR13 - R13-2561, Condition 7.1.3., Equipment ID (C-2090, C-2090B)]

7.1.4. Fugitive emissions from equipment (e.g. pipes, pumps, flanges, etc.) in the carbon treater activation/de-activation process, which is placed in toxic air pollutant service, as defined by 45CSR§27-2.11., shall be integrated into the existing (45CSR27) Leak Detection and Repair (LDAR) program, as defined by 40 CFR 63, Subpart H. [45CSR13 - R13-2561, Condition 7.1.4]

7.1.5. The permitted facility shall comply with all applicable requirements of 40CFR63, Subpart PPP – Polyether Polyols Production, with the exception of any more stringent limitations set forth in this permit. Since the permittee uses epoxides in the production of polyether polyols the affected source is subject to 63.1425(b), process vent control requirements as follows:

(b) *Requirements for epoxide emissions.* The owner or operator of an affected source where polyether polyol products are produced using epoxides shall reduce epoxide emissions from process vents from batch unit operations and continuous unit operations within each PMPU in accordance with either paragraph (b)(2) of this section.

(2) For existing affected sources, the owner or operator shall comply with paragraph (b)(2)(ii)

(ii) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent;

[45CSR13 - R13-2561, Condition 7.1.5, 45CSR34 and 40 C.F.R. §63.1425(b)(2)(II), Equipment ID (C-2090, C-2090B)]

7.1.6. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment and associated monitoring equipment listed in Section 1.0 and affected by Section 7.0 of this permit in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 - R13-2561, Condition 7.1.6]

7.2. Monitoring Requirements

7.2.1. For the purpose of determining compliance with the requirements set forth in Section 7.1.3., the permittee shall monitor the flow rate of the off-gas vented from the activation/de-activation process to the Dow boiler units, ~~B-25~~, B-26 and/or B-27.

[45CSR13 - R13-2561, Condition 7.2.1., Equipment ID(s) (C-2090, C-2090B)]

7.2.2. For the purpose of determining compliance with Section 7.1.5. of this permit, the permittee shall conduct monitoring in accordance with the requirements set forth in 40CFR63, Subpart PPP - Polyethers Polyol Production.

[45CSR13 - R13-2561, Condition 7.2.2., Equipment ID(s) (C-2090, C-2090B)]

7.3. Testing Requirements

7.3.1. Reserved.

7.4. Recordkeeping Requirements

7.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 and affected by Section 7.0 of this permit, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - R13-2561, Condition 7.4.2., Equipment ID(s) (~~B-25~~, B-26, B-27)]

7.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 and affected by Section 7.0 of this permit, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - R13-2561, Condition 7.4.3., Equipment ID(s) (B-25, B-26, B-27)]

- 7.4.3. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 7.2.1., the permittee shall record and maintain records of the flow of the off-gas vented from the activation/de-activation process to the Dow boiler units, ~~B-25~~, B-26 and/or B-27. Such records shall include, but not be limited to the total daily flow, the highest hourly flow rate per day, the highest hourly flow rate observed during the month, and the total monthly flow rate.

[45CSR13 - R13-2561, Condition 7.4.4., Equipment ID(s) (C-2090, C-2090B)]

- 7.4.4. For the purpose of demonstrating compliance with Section 7.1.5. of this permit, the permittee shall maintain records in accordance to the requirements set forth in 40CFR63, Subpart PPP – Polyethers Polyol Production. [45CSR13 - R13-2561, Condition 7.4.5., Equipment ID(s) (C-2090, C-2090B)]

7.5. Reporting Requirements

- 7.5.1. Reserved.

7.6. Compliance Plan

- 7.6.1. Reserved.