



Plant ID No. 03-54-039-00007

Application for Renewal of Title V Permit No. R30-03900007-2011 for the Larvin Unit

Redacted Copy

March 30, 2016

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Cover Document Confidential Information



Company Name	Bayer	Responsible	Official	James H. Covington
Company Address	Route 25	Confidential	Name	Connie Stewart
	Institute, WV	Information	Title	Director - QHSE
Person/Title		Designee in A	Address	Route 25
Submitting	James H. Covingion	State of WV		Institute, WV
Confidential	Vice President,		Phone	304-767-6123
Information	Bayer		Fax	304-767-6621
			Email	Connie.stewart@bayer.com

Reason for Submittal of Confidential Information:

This permit application for renewal of the Title V permit is required by 45 CSR 30. The renewal application lists specific information for the Larvin manufacturing process that is protected under the Trade Secret definition.

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
Attachment C - Process Flow Diagrams, pp. 22 to 24 of application – Entire diagram. Attachment E – Emission	The information presented in the portions of the permit application identified as confidential information constitutes information protected under the definition of "trade secrets" set forth in 45 CSR § 31-2.3:	Permanently, or until a Responsible Official for Bayer declassifies the confidential information
Unit Forms, pp. $30 - 261$, specifically the description of the emission unit and the maximum throughputs on	 a) Bayer continues to claim business confidentiality protection for this information. The claim has not expired by its term, or been waived or withdrawn. 	
each of the following pages: 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81, 84, 87, 90, 93, 96, 99, 102, 105, 108, 111, 114, 117, 120, 123, 126, 129, 132, 135, 138, 141, 144, 147, 150, 153, 156, 159, 162, 165, 168, 171, 174, 177,	(b) Bayer has taken, and continues to take, all reasonable measures to protect the confidentiality of this information through such measures as vendor licensee nondisclosure agreements, limited distribution lists, business and product trademarks, shredding of documents marked confidential prior to disposal, and appropriately marking and redacting copies.	
180, 183, 186, 189, 192, 195, 198, 201, 204, 207, 210, 213, 216, 219, 222, 225, 228, 231, 234, 237, 240, 243, 246, 249, 252, 255, and 258.	(c) The confidential Information is not reasonably obtainable without Bayer's consent by persons other than the Bayer employees and/or vendors/consultants who need to know and personnel in the West Virginia Department of Environmental Protection, Division of Air Quality. Within the company, Bayer has distributed this information on a need-to-	

Cover Document Confidential Information



Identification of	Potionale for Confidential Claim	Confidential Treatment Time Poriod
Confidential mormation	know basis only. In addition, Bayer expects its employees to prevent inadvertent dissemination of information. Special provisions for shredding business confidential documents have been made to allow for recycling. There are no plans to relax strict maintenance of business confidentiality for this technology.	renou
	(d) No statute specifically requires the disclosure of this information.	
	(e) Bayer claims business confidentiality protection for the identified parts of this permit application primarily because the information, if released, would allow competitors to determine the manner in which Bayer manufactures its products. The raw materials and equipment are available to current and potential competitors; therefore, disclosure of this information would allow competitors to manufacture this product without either paying for the technology or conducting the necessary research and development. This would give competitors an undue economic advantage since they could potentially manufacture the product at a lower cost.	

Responsible Official Signature:	Complement	
Responsible Official Title:	Vice President, Bayer	Director of OHSE and delecter
Date Signed:	March 30, 2016	In Jim Covindon VP Bayen

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OF WEST VIA	WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
	DIVISION OF AIR QUALITY
	601 57 th 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

 Name of Applicant (As registered with the WV Secretary of State's Office): Bayer 	2. Facility Name or Location: Route 25 Institute, West Virginia 25112
3. DAQ Plant ID No.: 039-00007	4. Federal Employer ID No. (FEIN): 132887825
5. Permit Application Type:	
☐ Initial Permit When did op	perations commence? 1982
Permit Renewal What is the o	expiration date of the existing permit? 10/03/2016
Update to Initial/Renewal Permit Application	
6. Type of Business Entity:	7. Is the Applicant the:
 ☑ Corporation ☐ Governmental Agency ☐ LLC ☐ Partnership ☐ Limited Partnership 	Owner Operator Both
8. Number of onsite employees: 125	If the Applicant is not both the owner and operator, please provide the name and address of the other party.
9. Governmental Code:	
 Privately owned and operated; 0 Federally owned and operated; 1 State government owned and operated; 2 	County government owned and operated; 3 Municipality government owned and operated; 4 District government owned and operated; 5
10. Business Confidentiality Claims	
Does this application include confidential information If yes, identify each segment of information on each justification for each segment claimed confidential, in accordance with the DAQ's "PRECAUTIONARY NO	n (per 45CSR31)? Yes No page that is submitted as confidential, and provide ncluding the criteria under 45CSR§31-4.1, and in <i>TICE-CLAIMS OF CONFIDENTIALITY</i> " guidance.

11. Mailing Address		
Street or P.O. Box: Post Office Box 1005		
City: Institute	State: WV	Zip: 25112
Telephone Number: (304) 767-6500	Fax Number: (304) 767-6879	

12. Facility Location		
Street: Route 25	City: Institute	County: Kanawha
UTM Easting: 432.0 km	UTM Northing: 4248.3 km	Zone: 17 or 18
Directions: Adjacent to WV Route 2	5, west of Institute, West Virginia	
Portable Source? Yes	No	
Is facility located within a nonattainment area? Yes No If yes, for what air pollutants?		
Is facility located within 50 miles of another state? Xes No I		If yes, name the affected state(s). Kentucky Ohio
Is facility located within 100 km of a	a Class I Area ¹ ? 🗌 Yes 🛛 No	If yes, name the area(s).
If no, do emissions impact a Class I	Area ¹ ? 🗌 Yes 🛛 No	
¹ Class I areas include Dolly Sods and Otter Face Wilderness Area in Virginia.	Creek Wilderness Areas in West Virginia, and Si	henandoah National Park and James River

13. Contact Information			
Responsible Official: James H. Covington		Title: Vice President, Bayer	
Street or P.O. Box: Post Office Box 1005			
City: Institute	State: WV	Zip: 25112	
Telephone Number: (304) 767-6500	Fax Number: (304) 767-6879		
E-mail address: jim.covington@bayer.com			
Environmental Contact: Linda K. Tennant		Title: Environmental Specialist	
Street or P.O. Box: Post Office Box 1005			
City: Institute	State: WV	Zip: 25112	
Felephone Number: (304) 767-6161 Fax Number: (304) 767-6879			
E-mail address: linda.tennant@bayer.com			
Application Preparer:		Title:	
Company:			
Street or P.O. Box:			
City:	State:	Zip:	
Telephone Number:	Fax Number:		
E-mail address:			

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
LARVIN Unit	LARVIN	325320	2879

Provide a general description of operations.

Using a highly technical and complex process, the Larvin® Unit produces Larvin® (thiocarb) pesticide for commercial marketing. The elaborate technical process of this unit involves several reactions. Commercially purchased Methomyl is converted to Larvin® by reaction with sulfur dichloride in the presence of a complexing agent. The process utilizes methanol and tetralin in the reaction and purification steps.

Closed sampling systems and all process equipment venting to the Process Thermal Oxidizer (PTO)/Scrubber or existing flare control emissions and reduce odors from the manufacturing process.

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."
- 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.

18. Applicable Requirements Summary				
Instructions: Mark all applicable requirements.				
SIP	☐ FIP			
Minor source NSR (45CSR13)	D PSD (45CSR14)			
NESHAP (45CSR34)	Nonattainment NSR (45CSR19)			
Section 111 NSPS	Section 112(d) MACT standards			
Section 112(g) Case-by-case MACT	112(r) RMP			
Section 112(i) Early reduction of HAP	Consumer/commercial prod. reqts., section 183(e)			
Section 129 Standards/Reqts.	Stratospheric ozone (Title VI)			
Tank vessel reqt., section 183(f)	Emissions cap 45CSR§30-2.6.1			
NAAQS, increments or visibility (temp. sources)	45CSR27 State enforceable only rule			
45CSR4 State enforceable only rule	Acid Rain (Title IV, 45CSR33)			
Emissions Trading and Banking (45CSR28)	Compliance Assurance Monitoring (40CFR64)			
\Box CAIR NO _x Annual Trading Program (45CSR39)	CAIR NO _x Ozone Season Trading Program (45CSR40)			
CAIR SO ₂ Trading Program (45CSR41)				

19. Non Applicability Determinations

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.

• **40CFR60, Subpart D** - Standards of Performance for Fossil-Fuel-fired Steam Generators constructed after August 17, 1971

Basis for Applicability Determination: Applies to steam generation units with heat input > 250 mmBtu/hr, and were constructed, reconstructed, or modified after 8/17/71. The Unit's thermal oxidize heat input design capacity is < 250 MMBtu/hr.

• **40CFR60**, **Subpart Db** - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

Basis for Applicability Determination: Applies to steam generating units with heat input > 100 mmBtu/hr which were constructed, reconstructed, or modified after 6/19/84. The Unit's thermal oxidizer does not burn one of the listed fuels.

• **40CFR60, Subpart Dc** - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

Basis for Applicability Determination: Applies to steam generating units with heat input of 10-100 mmBtu/hr which were constructed, reconstructed, or modified after 6/9/89 and burn one of the listed fuels. The Unit's thermal oxidizer does not burn one of the listed fuels.

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.

- **40CFR60, Subpart E** Standards of Performance for Incinerators. *Basis for Applicability Determination:* Applies only to burning solid waste. The Unit's thermal oxidizer only burns gaseous waste.
- **40CFR60**, **Subpart K** Standards of Performance for Storage Vessels for Petroleum Liquids constructed or modified after June 11, 1973 and prior May 19, 1978. *Basis for Applicability Determination*: Petroleum liquids are not stored in vessels with a capacity greater than
- 40,000 gallons.
 40CFR60, Subpart Ka Standards of Performance for Storage Vessels for Petroleum Liquids constructed or modified after May 18, 1978 and prior July 23, 1984.

Basis for Applicability Determination: Petroleum liquids are not stored in vessels with a capacity greater than 40,000 gallons.

• **40CFR60**, **Subpart O** - Standards of Performance for Sewage Treatment Plants. *Basis for Applicability Determination*: The Unit does not operate a municipal treatment plant.

- 40CFR63, Subpart G National Emissions Standards for Organic HAPs from the SOCMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater. *Basis for Applicability Determination*: Subpart G is not applicable because the Unit does not manufacture as an intermediate or final product any of the listed chemicals that would trigger applicability.
- **40CFR63, Subpart I** National Emission Standards for Organic Hazardous Air Pollutants for certain processes subject to the negotiated regulation for Equipment Leaks. *Basis for Applicability Determination:* Subparts YY and FFFF take precedence.
- **40CFR63, Subpart EEEE** National Emission Standards for Organic Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). *Basis for Applicability Determination*: Storage tanks were below the regulation's capacity or vapor pressure threshold, specifically exempt by the regulation, or are regulated under another MACT regulation.
- **40CFR63, Subpart FFFF** National Emission Standards for Hazardous Air Pollutant Emissions: Miscellaneous Organic Chemical Manufacturing (MON). *Basis for Applicability Determination*: The Plant is subject to 40CFR63, Subpart MMM – National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production (PAI).

20. Facility-Wide Applicable Requirements

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

Open burning. The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]

Open burning exemptions. The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]

Asbestos. The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. 61 and 45CSR34]

Odor. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]

Standby plan for reducing emissions. When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]

Emission inventory. The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]

Ozone-depleting substances. For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B: a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161. [40 C.F.R. 82, Subpart F]

Risk Management Plan. Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71. **[40 C.F.R. 68]**

The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-0641 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to. **[45CSR13, Permit No. R13-0641]**

Permit Shield

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

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: N/A

<u>Testing:</u>

Stack testing. As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

(continued....)

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

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

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.)

<u>Recordkeeping:</u>

Monitoring information. The permittee shall keep records of monitoring information that include the following: a. The date, place as defined in this permit and time of sampling or measurements;

- b. The date(s) analyses were performed;
- c. 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.

[45CSR§30-5.1.c.2.A.]

Retention of records. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records. **[45CSR§30-5.1.c.2.B.]**

Odors. For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. **[45CSR§30-5.1.c. State-Enforceable only.]**

<u>Reporting:</u>

Responsible official. Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. **[45CSR§30-5.1.c.3.E.]**

Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

(continued...)

Are you in compliance with a	Il facility-wide applicable requirements?	\boxtimes	Yes	🗌 No
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20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

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.)

If to the DAQ:	If to the US EPA:
Director	Associate Director
WVDEP	Office of Enforcement and Permits Review (3AP12)
Division of Air Quality	U. S. Environmental Protection Agency
601 57th Street SE	Region III
Charleston, WV 25304	1650 Arch Street
Phone: 304/926-0475	Philadelphia, PA 19103-2029
FAX: 304/926-0478	-

Certified emissions statement. The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

Compliance certification. The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. **[45CSR§30-5.3.e.]**

Semi-annual monitoring reports. The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. **[45CSR§30-5.1.c.3.A.]**

Emergencies. For reporting emergency situations, refer to Section 2.17 of this permit.

Deviations.

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

(continued...)

Are you in compliance with all facility-wide applicable requirements?		Yes	🗌 No
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20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken. [45CSR\$30-5.1.c.3.C.] b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. [45CSR\$30-5.1.c.3.B.]
New applicable requirements. If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement. [45CSR§30-4.3.h.1.B.]
Are you in compliance with all facility-wide applicable requirements? 🖂 Yes 🔲 No

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit (<i>if any</i>)
30-03900007-2011 (Group 6)	10/3/2011	Modified 2/1/2013 Modified 11/22/2013
R13-0641E	05/06/2014	Permit Determination 07/17/2014
	/ /	
	/ /	
	/ /	
	/ /	
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22. Inactive Permits/Obsolete Permit Conditions			
Permit Number	Date of Issuance	Permit Condition Number	
R13-0641D	09/05/2013	Permit Obsolete	
R13-0641C	01/16/2013	Permit Obsolete	
R13-0641B	06/21/2012	Permit Obsolete	
R13-0641A	04/13/2012	Permit Obsolete	
R13-0641	05/07/1982	Permit Obsolete	
	/ /		
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23. Facility-Wide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	
Carbon Monoxide (CO)	9.37	
Nitrogen Oxides (NO _X)	51.4	
Lead (Pb)		
Particulate Matter $(PM_{2.5})^1$	2.6	
Particulate Matter $(PM_{10})^1$	2.6	
Total Particulate Matter (TSP)	2.6	
Sulfur Dioxide (SO ₂)	68.69	
Volatile Organic Compounds (VOC)	22.31	
Hazardous Air Pollutants ²	Potential Emissions	
Acetonitrile	0.89	
Aniline	0.22	
Hydrogen Chloride	1.81	
Methanol	18.8	
Methyl Chloride	0.02	
$^{1}PM_{2.5}$ and PM ₁₀ are components of TSP. ^{2}For HAPs that are also considered PM or VOCs, emissions show the Criteria Pollutants section.	ld be included in both the HAPs section and	

24.	Insign	ificant Activities (Check all that apply)
\boxtimes	1.	Air compressors and pneumatically operated equipment, including hand tools.
\boxtimes	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
\boxtimes	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.
\boxtimes	4.	Bathroom/toilet vent emissions.
\boxtimes	5.	Batteries and battery charging stations, except at battery manufacturing plants.
\boxtimes	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.
	7.	Blacksmith forges.
\boxtimes	8.	Boiler water treatment operations, not including cooling towers.
\boxtimes	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
\boxtimes	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
\boxtimes	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
\boxtimes	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
	14.	Demineralized water tanks and demineralizer vents.
\boxtimes	15.	Drop hammers or hydraulic presses for forging or metalworking.
\boxtimes	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.
\boxtimes	17.	Emergency (backup) electrical generators at residential locations.
\boxtimes	18.	Emergency road flares.
	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.	Insign	ificant Activities (Check all that apply)
	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:
	01	
	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
M	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
	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.
\boxtimes	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
\boxtimes	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
\boxtimes	26.	Fire suppression systems.
\boxtimes	27.	Firefighting equipment and the equipment used to train firefighters.
	28.	Flares used solely to indicate danger to the public.
\boxtimes	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.
\square	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
\boxtimes	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
	32.	Humidity chambers.
\square	33.	Hydraulic and hydrostatic testing equipment.
	34.	Indoor or outdoor kerosene heaters.
\boxtimes	35.	Internal combustion engines used for landscaping purposes.
	36.	Laser trimmers using dust collection to prevent fugitive emissions.
	37.	Laundry activities, except for dry-cleaning and steam boilers.
	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
	39.	Oxygen scavenging (de-aeration) of water.
	40.	Ozone generators.

24.	Insign	ificant Activities (Check all that apply)
	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.)
	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.
\boxtimes	43.	Process water filtration systems and demineralizers.
\boxtimes	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.
\boxtimes	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
\boxtimes	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
	48.	Shock chambers.
	49.	Solar simulators.
	50.	Space heaters operating by direct heat transfer.
\boxtimes	51.	Steam cleaning operations.
\boxtimes	52.	Steam leaks.
	53.	Steam sterilizers.
\boxtimes	54.	Steam vents and safety relief valves.
\boxtimes	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.
\boxtimes	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.
	57.	Such other sources or activities as the Director may determine.
\boxtimes	58.	Tobacco smoking rooms and areas.
\boxtimes	59.	Vents from continuous emissions monitors and other analyzers.

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**.

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

Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.

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: Connie Stewart

Title: Director - QHSE

30/16

Responsible official's signature:

Signature: Course Alewant

<u>Signature Date:</u> <u>(Must be signed and dated in blue ink)</u>

Not	Note: Please check all applicable attachments included with this permit application:		
\boxtimes	ATTACHMENT A: Area Map		
\boxtimes	ATTACHMENT B: Plot Plan(s)		
\boxtimes	ATTACHMENT C: Process Flow Diagram(s)		
\boxtimes	ATTACHMENT D: Equipment Table		
\boxtimes	ATTACHMENT E: Emission Unit Form(s)		
\boxtimes	ATTACHMENT F: Schedule of Compliance Form(s)		
\boxtimes	ATTACHMENT G: Air Pollution Control Device Form(s)		
\boxtimes	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/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

Attachment A

Area Map





Attachment A Area Map

USGS 7.5 Minute Series Topographic Map St. Albans and Alum Creek, W.Va. Quadrangles

Attachment B

Plot Plan



Attachment C

Process Flow Diagram

Attachment C-1

Bayer Larvin Reaction Product Recovery – 332

Claimed Confidential – Bayer – 3/30/2016

Attachment C-2

Bayer Larvin Solvent Recovery – 332

Claimed Confidential – Bayer – 3/30/2016

Attachment C-3

Bayer Larvin Unit Services – 332

Claimed Confidential – Bayer – 3/30/2016

Attachment D

Title V Equipment Table

ATTACHMENT D - Emission Units Table								
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)								
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device			
B-1	A331	MOM Storage Bin	1983	292,500 lb	Baghouse w/Absolute Filter (A331)			
B-2	A331	MOM Storage Bin	1983	292,500 lb	Baghouse w/Absolute Filter (A331)			
B-3	332A	Storage Bin	1983	48,000 lb	Baghouse w/Absolute Filter (A332)			
B-4	332A	Storage Bin	1983	48,000 lb	Baghouse w/Absolute Filter (A332)			
E-26	330B (15e) 332C	North Weigh Tank	1984	500 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-27	330B (15e) 332C	West Weigh Tank	1984	500 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-28	330B (15e) 332C	East Weigh Tank	1984	500 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-29	330B (15e) 332C	North Reactor	1984	6,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-30	330B (15e) 332C	West Reactor	1984	6,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-31	330B (15e) 332C	East Reactor	1984	6,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-32	330B (15e) 332C	Methomyl Solution Tank	1996	6,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-33	330B (15e) 332C	Quench Tank	1984	4,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-34	330B (15e) 332C	Belt Filter	1984/2014	8,575 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-34	PSV 3230-106	Belt Filter Secondary Emergency Vent	1984/2014	n/a	n/a			
E-35	330B (15e) 332C	Reslurry Tank	1984	1,500 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
E-36	330B (15e) 332C	North Centrifuge	1984	147 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			

ATTACHMENT D - Emission Units Table							
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)							
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device		
E-37	330B (15e) 332C	South Centrifuge	1984	147 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-38	330B (15e) 332C	Dryer	1984	15,835 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-39	332A	Larvin Packaging	1984	1.85 ft3/min	Baghouse with Absolute Filter (A332)		
E-40	330B (15e) 332C	4-PPC Reactor	1983	15,674 lb/hr	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-41	330B (15e) 332C	Neutralization Reactor	1984	6,450 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-42	330B (15e) 332C	TOAD Column	1984	17,132 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-43	330B (15e) 332C	TOAD Column Decanter	1983	N/A	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-44	330B (15e) 332C	Drying Column	1984	11,450 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-45	330B (15e) 332C	Recovery Column	1984	10,800 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-46	330A	Sump	1982	5,000 gal	Scrubber (A330)		
E-47	N/A	Sump	1982	10,700 gal	N/A		
E-48	330B (15e) 332C	Process Vent Scrubber	1983	3,106 lb/hr	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-49	330B (15e) 332C	Vent Blowers	1982	500 scfm	PTO/Scrubber (B332/C332) or Flare (B330 (7c))		
E-51	N/A	Instrument Air Dryer	1982	14kW	N/A		
E-52	N/A	Refrigeration	1982	629 tons	N/A		
T-1	335A	Storage Tank	1982	282,000 gal	N/A		
T-2	335B	Storage Tank	1982	282,000 gal	N/A		

	ATTACHMENT D - Emission Units Table							
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)								
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device			
T-4	330B (15e) 332C	Storage Tank	1984	40,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-5	330B (15e) 332C	Storage Tank	1984	40,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-6	330B (15e) 332C	Storage Tank	1984	40,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-7	335C	Storage Tank	1984	40,000 gal	N/A			
T-11	330B (15e) 332C	Storage Tank	1984	40,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-18	330B (15e) 332C	Storage Tank	1985	20,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-23	330B (15e) 332C	Storage Tank	1985	44,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-24	330B (15e) 332C	Storage Tank	2011	40,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-25	330B (15e) 332C	Storage Tank	1984	40,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-26	330B (15e) 332C	Storage Tank	1984	10,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-27	330B (15e) 332C	Storage Tank	1984	15,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-28	330B (15e) 332C	Storage Tank	1984	15,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-29	330B (15e) 332C	Storage Tank	1984	2,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-30	330B (15e) 332C	Storage Tank	1984	1,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-31	330B (15e) 332C	Storage Tank	1984	1,500 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-32	330B (15e) 332C	Storage Tank	1984	1,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
	ATTACHMENT D - Emission Units Table							
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	(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)							
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device			
T-33	330B (15e) 332C	Storage Tank	1984	15,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-34	330B (15e) 332C	Storage Tank	1984	6,400 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-35	330B (15e) 332C	Storage Tank	1984	24,400 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-37	337A	Storage Tank	2008	50,000 gal	Fugitive Air Scrubber (A330)			
T-38	337B	Storage Tank	2008	50,000 gal	Fugitive Air Scrubber (A330)			
T-39	330B (15e) 332C	Storage Tank	1985	15,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-41	330B (15e) 332C	Storage Tank	1984	5,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-42	330B (15e) 332C	Storage Tank	1984	5,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-43	330B (15e) 332C	Storage Tank	1984	15,800 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
T-49	336B	Storage Tank	1985	396 gal	N/A			
T-53	3351	Storage Tank	1984	17,800 gal	N/A			
T-55	337D	Storage Tank	1984	550 gal	N/A			
T-58	337E	Storage Tank	1984	1,280 gal	N/A			
T-59	335K	Atm. Flash Storage Tank	1985	320 gal	N/A			
T-62	331B	Foam Storage Tank	1983	45,000 gal	N/A			
TT-1	330B (15e) 332C	Tank Truck Loading	2012	5,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
TT-2	330B (15e) 332C	Tank Truck Loading	2012	5,000 gal	PTO/Scrubber (B332/C332) or Flare (B330 (7c))			

	ATTACHMENT D - Emission Units Table					
	(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)					
Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device	
Control Dev	ices			<u> </u>		
A330 (1c)	330A (2e)	Fugitive Air Packed Bed Scrubber	1983	8,400 acfm	N/A	
A331 (3c)	331A (8e)	Methomyl Baghouse with Absolute Filter	1983	9,000 acfm	N/A	
A332 (5c)	332A (10e)	Larvin Baghouse Absolute Filter	2011	7,000 acfm	N/A	
B330 (7c)	330B (15e)	Backup Process Flare	1982	17 MMBTU/hr	N/A	
B330 (7c (a))	330B (15e-a)	Emergency Flare	1982	0.46 MMBTU/hr (pilot)	N/A	
E-50	330B	Emergency Scrubber	1985	29,605 lb/hr	N/A	
B332	332C	РТО	2011	14 MMBTU/hr 99.9% Efficiency	Scrubber C332	
C332	332C	Scrubber	2011	10,500 acfm 99% SO ₂ /HCl Efficiency	N/A	

Attachment E

Emission Unit Forms

ATTACHMENT E - Emission Unit Form					
Emission Unit Description					
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	vices associated mit:		
B-1	MOM Storage Bin	A331 Baghouse with	Absolute Filter		
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):		
Manufacturer: N/A	Model number: N/A	Serial number: N/A			
Construction date: N/A	Installation date: 1983	Modification date(s N/A):		
Design Capacity (examples: furnace 292,500 lb	s - tons/hr, tanks - gallons):	1			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatin 365 days/yr	ng Schedule:		
Fuel Usage Data (fill out all applical	ble fields)				
Does this emission unit combust fue	?Yes <u>X</u> No	If yes, is it?			
		Indirect Fired	Direct Fired		
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:		
N/A 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	N/A	N/A	N/A		
N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A		

Potential Emissions		
PPH	TPY	
N/A	N/A	
	F	
See Exhibit E-1 –	Emissions Summary	
N/A	N/A	
N/A	N/A	
Potential Emissions		
PPH	TPY	
N/A	N/A	
Potential Emissions		
PPH	TPY	
N/A	N/A	
	Potential PPH N/A N/A N/A N/A N/A N/A See Exhibit E-1 - N/A N/A N/A Potential PPH N/A Potential PPH N/A 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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: B-2	Emission unit name: MOM Storage Bin	List any control dev with this emission un A331 Baghouse with	ices associated nit: Absolute Filter	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1983	Modification date(s) N/A	:	
Design Capacity (examples: furnace 292,500 lbs	s - tons/hr, tanks - gallons):	I		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatin 365 days/yr	g Schedule:	
Fuel Usage Data (fill out all applicat	ole fields)			
Does this emission unit combust fuel	?Yes <u>X</u> No	If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:	
N/A 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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Potential Emissions		
РРН	TPY	
N/A	N/A	
	F · · · · 6	
See Exhibit E-1 – Emissions Summary		
N/A	N/A	
N/A	N/A	
Potential Emissions		
РРН	TPY	
N/A	N/A	
Potential Emissions		
PPH	TPY	
N/A	N/A	
	Potential PPH N/A N/A N/A N/A N/A N/A See Exhibit E-1 - N/A N/A Potential PPH N/A Potential PPH 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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: B-3	Emission unit name: Storage Bin	List any control devi with this emission un A332 Baghouse with	i ces associated nit: Absolute Filter	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)	:	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1983	Modification date(s) N/A	:	
Design Capacity (examples: furnace 48,000 lbs	s - tons/hr, tanks - gallons):	I		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:	
Fuel Usage Data (fill out all applicat	ble fields)			
Does this emission unit combust fuel	?Yes _XNo	If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:	
N/A 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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})	See Eshibit E 1	Emissions Summany	
Particulate Matter (PM ₁₀)	See Exhibit E-1 –	Emissions Summary	
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potential Emissions		
Criteria and HAP	PPH	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate the po	tential emissions (include dates	s of any stack tests conducted,	
versions of software used, source and dates	s of emission factors, etc.).	•	
En sin senin a Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: B-4	Emission unit name: Storage Bin	List any control devi with this emission ur A332 Baghouse with	ices associated nit: Absolute Filter	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)	:	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1983	Modification date(s) N/A	:	
Design Capacity (examples: furnace 48,000 lbs	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operating 365 days/yr	g Schedule:	
Fuel Usage Data (fill out all applicat	ole fields)			
Does this emission unit combust fuel	?Yes <u>X</u> No	If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:	
N/A N/A				
List the primary fuel type(s) and if a the maximum hourly and annual fue	applicable, the secondary fuel type(s el usage for each.). For each fuel type l	isted, provide	
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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Potential	Emissions
РРН	ТРҮ
See E-hibit E 1	Emissions Commonly
See Exhibit E-1 –	Emissions Summary
Potential Emissions	
РРН	ТРҮ
See Exhibit E-1 – Emissions Summary	
Potential Emissions	
РРН	TPY
N/A	N/A
ntial emissions (include dates	s of any stack tests conducted,
f emission factors, etc.).	•
	See Exhibit E-1 – Potential PPH See Exhibit E-1 – Potential PPH N/A N/A N/A

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form					
Emission Unit Description					
Emission unit ID number: E-26	Emission unit name:	List any control devices associated with this emission unit: PTO/Scrubber (B332/C332) or Flare (B330 (7c))			
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):		
Manufacturer: N/A	Model number: N/A	Serial number: N/A			
Construction date: N/A	Installation date: 1984	Modification date(s	»):		
Design Capacity (examples: furnace 500 gal	es - tons/hr, tanks - gallons):	1			
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:		
Fuel Usage Data (fill out all applica	ble fields)				
Does this emission unit combust fue	Does this emission unit combust fuel? Yes X No If yes, is it?				
Indirect Fired Direct Fired					
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:		
N/A N/A					
List the primary fuel type(s) and if the maximum hourly and annual fu	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	N/A	N/A	N/A		
N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A		
N/A	N/A	N/A	N/A		

Emissions Data			
Criteria Pollutants	Potentia	ll Emissions	
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _x)			
Lead (Pb)	See Exhibit E-1 – Emissions Summary		
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)			
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	PPH	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	ll Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate the	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-27	Emission unit name: West Weigh Tank	List any control devi with this emission ur PTO/Scrubber (B332/	ces associated iit: (C332) or
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Claimed Confidential			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 500 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operating 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ole fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burner			ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potential Emissions		
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-28	Emission unit name: East Weigh Tank	List any control devi with this emission un PTO/Scrubber (B332, Flare (B330 (7c))	ices associated nit: /C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 500 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect FiredDirect		Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	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)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	PPH	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potential Emissions		
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate the	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

AT	TACHMENT E - Emission Uni	it Form	
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev	ices associated
E-29	North Reactor	PTO/Scrubber (B332 Flare (B330 (7c))	nit /C332) or
Provide a description of the emissi Claimed Confidential	on unit (type, method of operation, d	lesign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A):
Design Capacity (examples: furna 6,000 gal	ces - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applic	able fields)	I	
Does this emission unit combust fu	uel? Yes _XNo	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/o	r maximum horsepower rating:	Type and Btu/hr rat	ting of burners:
N/A N/A			
List the primary fuel type(s) and it the maximum hourly and annual f	f applicable, the secondary fuel type(s fuel usage for each.	s). For each fuel type	listed, provide
N/A			
Describe each fuel expected to be u	used during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

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

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	ices associated nit:
E-30	West Reactor	PTO/Scrubber (B332 Flare (B330 (7c))	/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s)	:
Design Capacity (examples: furnace 6,000 gal	es - tons/hr, tanks - gallons):	-	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applica	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burne			ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control devi with this emission up	ices associated
E-31	East Reactor	PTO/Scrubber (B332, Flare (B330 (7c))	/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.)):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 6,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	- See Erhibit E 1 Emissions Summers		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	ll Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	ll Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t versions of software used, source and	he potential emissions (include date dates of emission factors, etc.).	es of any stack tests conducted,	
En sin suin a Estimates			
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-32	Emission unit name: Methomyl Solution Tank	List any control devi with this emission un PTO/Scrubber (B332, Flare (B330 (7c))	ices associated nit: /C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.)):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1996	Modification date(s) N/A	:
Design Capacity (examples: furnace 6,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applical	ble fields)	1	
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	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)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate the	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No
ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control de with this emission u	vices associated mit:
E-33	Quench Tank	PTO/Scrubber (B332) Flare (B330 (7c))	2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s N/A	3):
Design Capacity (examples: furnace 4,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)	See Erhibit E 1 Emissions Summany		
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	PPH	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	ll Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate the	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control de	vices associated
E-34	Belt Filter	PTO/Scrubber (B33)	mit: 2/C332.) or
		Flare (B330 (7c))	, ccc2) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 8,575 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel? Yes X No		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control de with this emission u	vices associated
E-35	Reslurry Tank	PTO/Scrubber (B33) Flare (B330 (7c))	2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) :
Design Capacity (examples: furnace 1,500 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel?Yes _XNo		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control de	vices associated
E-36	North Centrifuge	PTO/Scrubber (B33)	unt: 2/C332) or
		Flare (B330 (7c))	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 147 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel? Yes _X_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:	
N/A		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	N/A	N/A	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)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)	1		
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate the versions of software used, source and	he potential emissions (include date dates of emission factors, etc.).	es of any stack tests conducted,	
Engineering Estimates			
Lingineering Lotinuces			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	vices associated mit:
E-37	South Centrifuge	PTO/Scrubber (B332 Flare (B330 (7c))	2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 147 gal	s - tons/hr, tanks - gallons):	I	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble 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:	
N/A		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	N/A	N/A	N/A

Revised - 07/31/07

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev	vices associated
E-38	Dryer	PTO/Scrubber (B33)	$\frac{1}{2}$
		Flare (B330 (7c))	2/0352)01
Provide a description of the emissio Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 15,835 gal	es - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applica	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-39	Emission unit name: Larvin Packaging	List any control devices associated with this emission unit: Baghouse/and Absolute Filter (A332)	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	onstruction date: /AInstallation date: 1984Modification date(s): N/A		
Design Capacity (examples: furnace 1.85 ft3/min	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it? Indirect Fired Indirect Fired Direct Fired			
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rating of burners:	
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential	l Emissions	
	РРН	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)		F	
Total Particulate Matter (TSP)	See Exhibit E-1 – Emissions Summary		
Sulfur Dioxide (SO ₂)	N/A	N/A	
Volatile Organic Compounds (VOC)	N/A	N/A	
Hazardous Air Pollutants	Potential Emissions		
	РРН	ТРҮ	
N/A	N/A	N/A	
Regulated Pollutants other than	Potential Emissions		
Criteria and HAP	PPH	TPY	
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-40	Emission unit name: 4-PPC Reactor	List any control dev with this emission u	vices associated mit:
		Flare (B330 (7c))	2/C332) OF
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1983	Modification date(s):
Design Capacity (examples: furnace 15,674 lbs/hr	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ole fields)		
Does this emission unit combust fuel	?Yes <u>X</u> No	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A	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	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)				
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary			
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 – Emissions Summary			
Regulated Pollutants other than	Potentia	l Emissions		
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	l dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number:	Emission unit name:	List any control devices associate		
E-41	Neutralization Reactor	PTO/Scrubber (B332) Flare (B330 (7c))	2/C332) or	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1984	Modification date(s N/A):	
Design Capacity (examples: furnace 6,450 gal	s - tons/hr, tanks - gallons):	1		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:	
Fuel Usage Data (fill out all applical	ble fields)	l		
Does this emission unit combust fue	!? Yes _XNo	If yes, is it? Indirect Fired	Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/AType 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	N/A	N/A	N/A	

Emissions Data				
Criteria Pollutants	Potentia	l Emissions		
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)				
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary			
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: E-42	Emission unit name: TOAD Column	List any control devices associate with this emission unit:		
		PTO/Scrubber (B332 Flare (B330 (7c))	2/C332) or	
Provide a description of the emissio Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.	.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1984	Modification date(s): N/A		
Design Capacity (examples: furnace 17,132 gal	es - tons/hr, tanks - gallons):	-		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:	
Fuel Usage Data (fill out all applica	ble fields)			
Does this emission unit combust fue	l? Yes _X_No	If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/AType 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. $\rm N/A$				
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	N/A	N/A	N/A	

Emissions Data				
Criteria Pollutants	Potentia	l Emissions		
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)	See Erhibit E 1 Emissions Summers			
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary			
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	ТРҮ		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-43	Emission unit name: TOAD Column Decanter	List any control devices associated with this emission unit: PTO/Scrubber (B332/C332) or Flare (B330 (7c))	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1983	Modification date(s): N/A	
Design Capacity (examples: furnace	s - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes _X_ No		If yes, is it?	
Indirect FiredDi		Direct Fired	
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burne			ing of burners:
N/A 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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	PPH	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)	See Erhibit E 1 Emissions Summany			
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary			
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	PPH	TPY		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	ll Emissions		
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate the	he potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-44	Emission unit name: Drying Column	List any control devices associated with this emission unit: PTO/Scrubber (B332/C332) or	
		Flare (B330 (7c))	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s): N/A	
Design Capacity (examples: furnace 11,450 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ole fields)	-	
Does this emission unit combust fuel? Yes _X_ No		If yes, is it?	
Indirect FiredDirect Fire			Direct Fired
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burne			ing of burners:
N/A 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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	See Exhibit E-1 – Emissions Summary		
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)			
Hazardous Air Pollutants	Potentia	Potential Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	РРН	TPY	
N/A	N/A	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.).			
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No
ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	ices associated nit:
E-45	Recovery Column	PTO/Scrubber (B332 Flare (B330 (7c))	/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s): N/A	
Design Capacity (examples: furnace 10,800 gal	s - tons/hr, tanks - gallons):	L	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect FiredDirect Fi			Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potentia	ll Emissions	
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	Soo Exhibit E 1 Emissions Summary		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	1 dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-46	Emission unit name: Sump	List any control dev with this emission u A330 Scrubber	vices associated mit
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1982	Modification date(s):
Design Capacity (examples: furnace 5,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes _X_No		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

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)	See Exhibit E-1 – Emissions Summary	
Hazardous Air Pollutants	Potential Emissions	
	PPH	ТРҮ
N/A	See Exhibit E-1 – Emissions Summary	
Regulated Pollutants other than	Pote	ntial Emissions
Criteria and HAP	PPH	TPY
N/A	N/A	N/A
List the method(s) used to calculate the pot versions of software used, source and dates	ential emissions (include of emission factors, etc.).	lates of any stack tests conducted,
Engineering Estimates		

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev	vices associated
E-47	Sump	with this emission u	nit:
		N/A	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1982	Modification date(s):
Design Capacity (examples: furnace 10,700 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel?Yes _X_No If yes, is it?		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A

N/A

N/A

Revised - 07/31/07

N/A

N/A

N/A

N/A

N/A

N/A

Emissions Data		
Criteria Pollutants	Potential Emissions	
	РРН	ТРҮ
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	
	РРН	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potenti	al Emissions
Criteria and HAP	РРН	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-48	Emission unit name: Process Vent Scrubber	List any control dev with this emission un PTO/Scrubber (B332 Flare (B330 (7c))	ices associated nit: /C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1983	Modification date(s) N/A	:
Design Capacity (examples: furnace 3106 lbs/hr	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	See Erhibit E 1 Emissions Summany		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t versions of software used, source and	he potential emissions (include date dates of emission factors, etc.).	es of any stack tests conducted,	
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: E-49	Emission unit name: Vent Blowers	List any control dev with this emission u PTO/Scrubber (B332 Flare (B330 (7c))	vices associated nit 2/C332) or	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1982	Modification date(s):	
Design Capacity (examples: furnace 500 scfm	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:	
Fuel Usage Data (fill out all applicat	ble fields)			
Does this emission unit combust fuel? Yes X No If yes, is it?				
		Indirect Fired	Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr ra	ting of burners:	
N/A		N/A	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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: E-51	Emission unit name: Instrument Air Dryer	List any control devi with this emission ur N/A	ces associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1982	Modification date(s) N/A	:
Design Capacity (examples: furnace 14 kW	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operating 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect FiredDirect Fired			Direct Fired
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of bu		ing of burners:	
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potential Emissions	
	РРН	ТРҮ
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	
	РРН	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potenti	al Emissions
Criteria and HAP	РРН	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: E-52	Emission unit name: Refrigeration	List any control dev with this emission u N/A	ices associated nit:	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1982	Modification date(s) N/A):	
Design Capacity (examples: furnace 629 tons	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:	
Fuel Usage Data (fill out all applicat	ble fields)	·		
Does this emission unit combust fuel? Yes X No If yes, is it?				
Indirect FiredDirect Fired			Direct Fired	
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ting of burners:	
N/A		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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data		
Criteria Pollutants	Potentia	al 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	N/A	N/A
Regulated Pollutants other than	Potentia	al Emissions
Criteria and HAP	PPH	TPY
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control devi with this emission un	ices associated nit:
1-1		N/A	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.)):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 282,000 gal	es - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operating 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applica	ble fields)	I	
Does this emission unit combust fuel? Yes X No If yes, is it?		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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 us	sed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

N/A

N/A

N/A

N/A

Emissions Data		
Criteria Pollutants	Potent	ial Emissions
	PPH	ТРҮ
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	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potent	ial Emissions
Criteria and HAP	PPH	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-2	Emission unit name: Storage Tank	List any control dev with this emission u N/A	vices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 282,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ole fields)	I	
Does this emission unit combust fuel? Yes _X_ No		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

Emissions Data		
Criteria Pollutants	Potenti	al Emissions
	РРН	ТРҮ
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	
	РРН	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potenti	al Emissions
Criteria and HAP	РРН	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: T-4	Emission unit name: Storage Tank	List any control devi with this emission ur PTO/Scrubber (B332/	ices associated hit: (C332) or	
		Flare (B330 (7c))		
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.)	:	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1984	Modification date(s): N/A		
Design Capacity (examples: furnace 40,000 gal	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr		
Fuel Usage Data (fill out all applicat	ble fields)	•		
Does this emission unit combust fuel? YesX_No		If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:	
N/A 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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number:	Emission unit name:	List any control devi with this emission ur	ces associated iit:	
1-3	Storage Tank	PTO/Scrubber (B332/ Flare (B330 (7c))	(C332) or	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.)	:	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1984	Modification date(s): N/A		
Design Capacity (examples: furnace 40,000 gal	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr		
Fuel Usage Data (fill out all applicat	ble fields)			
Does this emission unit combust fuel?Yes _X_ No		If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:	
N/A		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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data	
Criteria Pollutants Potential Emissions	
РРН ТРУ	
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)	
Hazardous Air Pollutants Potential Emissions	
РРН ТРУ	
N/A See Exhibit E-1 – Emissions Summary	
Regulated Pollutants other than Potential Emissions	
PPH TPY	
N/A N/A 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.).	
Engineering Estimates	

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	ices associated nit:
1-0	Storage Tank	PTO/Scrubber (B332 Flare (B330 (7c))	/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s): N/A	
Design Capacity (examples: furnace 40,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?		If yes, is it?	
Indirect FiredD		Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No
ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-7	Emission unit name: Storage Tank	List any control devi with this emission un N/A	ices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s) N/A	:
Design Capacity (examples: furnace 44,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X 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			ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potentia	al 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	N/A	N/A
Regulated Pollutants other than	Potential Emissions	
Criteria and HAP	PPH	TPY
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	ices associated nit:
1-11	Storage Tank	PTO/Scrubber (B332 Flare (B330 (7c))	/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 40,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fuel? Yes _X_ No		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)	1		
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	ТРҮ	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-18	Emission unit name: Storage Tank	List any control devi with this emission ur N/A	ces associated hit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s) N/A	:
Design Capacity (examples: furnace 20,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ole fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potent	tial Emissions
	РРН	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	
	РРН	TPY
N/A	N/A	N/A
Regulated Pollutants other than	Potent	tial Emissions
Criteria and HAP	РРН	TPY
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-23	Emission unit name: Storage Tank	List any control dev with this emission u N/A	ices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s):
Design Capacity (examples: furnace 44,000 gal	s - tons/hr, tanks - gallons):	I	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatir 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or	Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burners:		
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potential Emissions	
	РРН	ТРҮ
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	
	РРН	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potential Emissions	
Criteria and HAP	РРН	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-24	Emission unit name: Storage Tank	List any control dev with this emission u PTO/Scrubber (B332 Flare (B330 (7c))	vices associated nit: 2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	l esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 2011	Modification date(s):
Design Capacity (examples: furnace 40,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect FiredDirect Fired			Direct Fired
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of bur		ting of burners:	
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)	See Euclidit E 1 Emissions Summers		
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-25	Emission unit name: Storage Tank	List any control dev with this emission un PTO/Scrubber (B332 Flare (B330 (7c))	ices associated nit: /C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 40,000 gal	s - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)	•	
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect Fired		Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-26	Emission unit name: Storage Tank	List any control dev with this emission u PTO/Scrubber (B332 Flare (B330 (7c))	rices associated nit: 2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 10,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel?Yes _XNo		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	l dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-27	Emission unit name: Storage Tank	List any control dev with this emission u PTO/Scrubber (B332	ices associated nit /C332) or
		Flare (B330 (7c))	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A):
Design Capacity (examples: furnace 15,000 gal	s - tons/hr, tanks - gallons):	I	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)	•	
Does this emission unit combust fuel? Yes X No If yes, is it?		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)			
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	l Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dev with this emission u	vices associated mit:
1-28	Storage Tank	PTO/Scrubber (B332 Flare (B330 (7c))	2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 15,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)	1	
Does this emission unit combust fuel?Yes _XNoIf yes, is it?			
Indirect FiredDirect Fi			Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	See Exhibit E 1 Emissions Summery		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	1 dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-29	Emission unit name: Storage Tank	List any control dev with this emission u PTO/Scrubber (B332 Flare (B330 (7c))	vices associated nit: 2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 2,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel?Yes _XNo		If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

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)	
Hazardous Air Pollutants Potential Emissions	
РРН ТРҮ	
N/A See Exhibit E-1 – Emissions Summary	
Regulated Pollutants other than Potential Emissions	
PPH TPY	
N/A N/A 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.).	
Engineering Estimates	

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control dewith this emission u	vices associated mit:
1-50		PTO/Scrubber (B332) Flare (B330 (7c))	2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s	3):
Design Capacity (examples: furnace 1,000 gal	es - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applica	ble fields)	•	
Does this emission unit combust fuel? Yes X No If yes, is it?			
Indirect FiredDirect F			Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	Soo Exhibit E 1 Emissions Summary		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)]		
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	l Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	1 dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form					
Emission Unit Description					
Emission unit ID number:	Emission unit name:	List any control de	vices associated		
T-31	Storage Tank	PTO/Scrubber (B33)	$\frac{1}{2}$		
		Flare (B330 (7c))	2/0352/01		
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):		
Manufacturer: N/A	Model number: N/A	Serial number: N/A			
Construction date: N/A	Installation date: 1984	Modification date(s	s):		
Design Capacity (examples: furnace 1,500 gal	Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 1,500 gal				
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:		
Fuel Usage Data (fill out all applical	ble fields)				
Does this emission unit combust fuel? Yes X No If yes, is it?					
		Indirect Fired	Direct Fired		
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:		
N/A		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	N/A	N/A	N/A		

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	Soo Exhibit E 1 Emissions Summery		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	ll Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 – Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No
ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control de	vices associated
T-32	Storage Tank	PTO/Scrubber (B33)	mit: $2/(C332)$ or
		Flare (B330 (7c))	2/0352/01
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 1,000 gal			
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble 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 ra	ting of burners:
N/A		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	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)				
Lead (Pb)				
Particulate Matter (PM _{2.5})	See Exhibit E-1 – Emissions Summary			
Particulate Matter (PM ₁₀)				
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	l dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-33	Emission unit name: Storage Tank	List any control devi with this emission un PTO/Scrubber (B332, Flare (B330 (7c))	ices associated nit /C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 15,000 gal	s - tons/hr, tanks - gallons):	L	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)	•	
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ing of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)				
Lead (Pb)				
Particulate Matter (PM _{2.5})	See Exhibit E-1 – Emissions Summary			
Particulate Matter (PM ₁₀)				
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	ТРҮ		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	l dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATT	ATTACHMENT E - Emission Unit Form			
Emission Unit Description				
Emission unit ID number:	Emission unit name:	List any control de with this emission u	vices associated mit:	
1-34	Storage Tank	PTO/Scrubber (B332 Flare (B330 (7c))	2/C332) or	
Provide a description of the emissio Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1984	Modification date(s	»):	
Design Capacity (examples: furnace 6,400 gal	es - tons/hr, tanks - gallons):	1		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:	
Fuel Usage Data (fill out all applica	ble fields)	1		
Does this emission unit combust fuel? Yes X No If yes, is it? Indirect Fired Dir			Direct Fired	
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:	
N/A		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.				
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	N/A	N/A	N/A	

Emissions Data			
Criteria Pollutants	Potential Emissions		
	РРН	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO _X)	See Exhibit E 1 Emissions Summery		
Lead (Pb)			
Particulate Matter (PM _{2.5})			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary		
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO ₂)			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potentia	al Emissions	
	РРН	TPY	
N/A	See Exhibit E-1 -	- Emissions Summary	
Regulated Pollutants other than	Potentia	al Emissions	
	РРН	TPY	
N/A	N/A	N/A	
List the method(s) used to calculate t	he potential emissions (include date	es of any stack tests conducted,	
versions of software used, source and	dates of emission factors, etc.).		
Engineering Estimates			

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control devices associated with this emission unit	
1-55		PTO/Scrubber (B332 Flare (B330 (7c))	2/C332) or
Provide a description of the emissio Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 24,400 gal	es - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operation 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applical	ble fields)	1	
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		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	N/A	N/A	N/A

Potential Emissions			
РРН	TPY		
See Exhibit E-1 – Emissions Summary			
Potentia	ll Emissions		
РРН	TPY		
See Exhibit E-1 -	- Emissions Summary		
Potentia	ll Emissions		
РРН	TPY		
N/A	N/A		
the potential emissions (include date	es of any stack tests conducted,		
l dates of emission factors, etc.).			
	Potentia PPH See Exhibit E-1 - Potentia PPH See Exhibit E-1 - Potentia PPH N/A N/A		

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-37	Emission unit name: Storage Tank	List any control dev with this emission u A330	ices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 2008	Modification date(s) N/A):
Design Capacity (examples: furnace 50,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of bu		ting of burners:	
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potentia	al 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	N/A	N/A	
Regulated Pollutants other than	Potentia	al Emissions	
Criteria and HAP	PPH	TPY	
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-38	Emission unit name: Storage Tank	List any control dev with this emission un A330	ices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A):
Design Capacity (examples: furnace 50,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ole fields)	-	
Does this emission unit combust fuel? Yes X No If yes, is it?		If yes, is it?	
Indirect FiredDire		Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rat	ting of burners:
N/A		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	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data			
Criteria Pollutants	Potenti	al Emissions	
	РРН	ТРҮ	
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		
	РРН	TPY	
N/A	N/A	N/A	
Regulated Pollutants other than	Potential Emissions		
Criteria and HAP	РРН	TPY	
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-39	Emission unit name: Storage Tank	List any control dev with this emission un N/A	ices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s) N/A	:
Design Capacity (examples: furnace 15,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X 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:			
N/A 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 use	ed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)	See Exhibit E-1 – Emissions Summary			
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)				
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 – Emissions Summary			
Regulated Pollutants other than	Potential Emissions			
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATT	ACHMENT E - Emission Uni	it Form	
Emission Unit Description			
Emission unit ID number:	Emission unit name:	ame: List any control devices associate	vices associated
T-41	Storage Tank	PTO/Scrubber (B332 Flare (B330 (7c))	2/C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc	.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnac 5,000 gal	es - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	ng Schedule:
Fuel Usage Data (fill out all applica	ble fields)		
Does this emission unit combust fue	el?Yes <u>X</u> No	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		N/A	
List the primary fuel type(s) and if the maximum hourly and annual fu	applicable, the secondary fuel type(s lel usage for each.	s). For each fuel type	listed, provide
N/A			
Describe each fuel expected to be us	sed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)	See Exhibit E 1 Emissions Summary			
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary			
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	1 dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control devices associated	
T-42	Storage Tank	with this emission u	nit (C^{2}) or
		Flare (B330 (7c))	(C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s):
Design Capacity (examples: furnace 5,000 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operatir 365 days/yr	ıg Schedule:
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fue	!? YesX_ No	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:
N/A		N/A	
List the primary fuel type(s) and if a the maximum hourly and annual fue	applicable, the secondary fuel type(s el usage for each.). For each fuel type	listed, provide
N/A			
Describe each fuel expected to be us	ed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)	See Exhibit E-1 – Emissions Summary			
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)				
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	ТРҮ		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	I dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number:	Emission unit name:	List any control devices associated with this emission unit:	
1-43	Storage Tank	PTO/Scrubber (B332/ Flare (B330 (7c))	(C332) or
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s): N/A	
Design Capacity (examples: furnace 15,800 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: Claimed Confidential	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applical	ble fields)		
Does this emission unit combust fue	? Yes _X_ No	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:
N/A		N/A	
List the primary fuel type(s) and if a the maximum hourly and annual fu	applicable, the secondary fuel type(s el usage for each.	s). For each fuel type l	isted, provide
N/A			
Describe each fuel expected to be us	ed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)	See Exhibit E-1 – Emissions Summary			
Lead (Pb)				
Particulate Matter (PM _{2.5})				
Particulate Matter (PM ₁₀)				
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 – Emissions Summary			
Regulated Pollutants other than	Potential Emissions			
Criteria and HAP	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate	he potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-49	Emission unit name: Storage Tank	List any control dev with this emission u N/A	ices associated nit:
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s) N/A):
Design Capacity (examples: furnace 396 gal	s - tons/hr, tanks - gallons):	I	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X 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:			
N/A 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 use	ed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potent	ial Emissions
	PPH	ТРҮ
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	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potent	ial Emissions
Criteria and HAP	PPH	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-53	Emission unit name: Storage Tank	List any control devices associated with this emission unit: N/A	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s): N/A	
Design Capacity (examples: furnace 17,800 gal	s - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicat	ole fields)		
Does this emission unit combust fuel	?Yes <u>X</u> No	If yes, is it?	
		Indirect FiredDirect Fired	
Maximum design heat input and/or	Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burners:		
N/A		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.			

Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A
	Max. Sulfur Content N/A N/A N/A N/A N/A	Max. Sulfur ContentMax. Ash ContentN/AN/AN/AN/AN/AN/AN/AN/A

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	ТРҮ	
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	ТРҮ	
N/A	N/A	N/A	
Regulated Pollutants other than Criteria and HAP	Potent	Potential Emissions	
	PPH	ТРҮ	
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

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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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No
ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-55	Emission unit name: Storage Tank	List any control devi with this emission un N/A	ices associated nit:
Provide a description of the emissio Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s) N/A	:
Design Capacity (examples: furnace 550 gal	es - tons/hr, tanks - gallons):		
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all application	ble fields)	1	
Does this emission unit combust fue	l? Yes _XNo	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:
N/A N/A			
List the primary fuel type(s) and if a the maximum hourly and annual fu	applicable, the secondary fuel type(s el usage for each.	s). For each fuel type l	isted, provide
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

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

Emissions Data		
Criteria Pollutants	Potent	ial Emissions
	PPH	ТРҮ
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	Potent	ial Emissions
	PPH	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potent	ial Emissions
Criteria and HAP	PPH	ТРҮ
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: T-58	Emission unit name: Storage Tank	List any control devices associated with this emission unit: N/A		
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 1984	Modification date(s): N/A		
Design Capacity (examples: furnace 1,280 gal	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatir 365 days/yr	ng Schedule:	
Fuel Usage Data (fill out all applicat	ble fields)	I		
Does this emission unit combust fuel	?Yes <u>X</u> No	If yes, is it?		
Indirect FiredDirect Fired				
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:	
N/A	N/A N/A			
List the primary fuel type(s) and if a the maximum hourly and annual fue	applicable, the secondary fuel type(s el usage for each.). For each fuel type	listed, provide	
N/A				
Describe each fuel expected to be us	ed during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value	
N/A	N/A	N/A	N/A	

N/A

Emissions Data		
Criteria Pollutants	Potenti	al Emissions
	PPH	ТРҮ
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	Potenti	al Emissions
	РРН	ТРҮ
N/A	N/A	N/A
Regulated Pollutants other than	Potenti	al Emissions
Criteria and HAP	РРН	TPY
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: T-59	Emission unit name: Storage Tank	List any control devices associated with this emission unit N/A	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, de	esign parameters, etc.)):
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1983	Modification date(s) N/A	:
Design Capacity (examples: furnace 320 gal.	s - tons/hr, tanks - gallons):	I	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operatin 365 days/yr	g Schedule:
Fuel Usage Data (fill out all applicat	ble fields)		
Does this emission unit combust fuel? Yes X No If yes, is it?			
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:
N/A 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 us	ed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data		
Criteria Pollutants	Potentia	al 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	Potentia	al Emissions
	PPH	TPY
N/A	N/A	N/A
Regulated Pollutants other than	Potentia	al Emissions
Criteria and HAP	PPH	TPY
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATI	ACHMENT E - Emission Uni	it Form		
Emission Unit Description				
Emission unit ID number:	Emission unit name:	List any control devices associated		
T-62	Storage Tank	with this emission u	mit	
		N/A		
Provide a description of the emission Claimed Confidential	on unit (type, method of operation, d	esign parameters, etc	.):	
Manufacturer:	Model number:	Serial number:		
N/A	N/A	N/A		
Construction date: N/A	Installation date:	Modification date(s):	
Design Capacity (examples: furnac 45,000 gal	es - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: N/A	Maximum Operating Schedule: 365 days/yr		
Fuel Usage Data (fill out all applica	ble fields)			
Does this emission unit combust fue	el?Yes _XNo	If yes, is it?		
		Indirect Fired	Direct Fired	
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr ra	ting of burners:	
N/A		N/A		
List the primary fuel type(s) and if the maximum hourly and annual fu	applicable, the secondary fuel type(s lel usage for each.	s). For each fuel type	listed, provide	
N/A				
Describe each fuel expected to be u	sed during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data			
Criteria Pollutants	Potent	Potential Emissions	
	РРН	ТРҮ	
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	Potent	tial Emissions	
	PPH	ТРҮ	
N/A	N/A	N/A	
Regulated Pollutants other than	Potent	tial Emissions	
Criteria and HAP	РРН	TPY	
N/A	N/A	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.).

Engineering Estimates

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form				
Emission Unit Description				
Emission unit ID number: TT-1	Emission unit name: Tank Truck Loading Area	List any control devices associated with this emission unit:		
		Flare (B330 (7c))	(C352) 01	
Provide a description of the emission Claimed Confidential	n unit (type, method of operation, do	esign parameters, etc.):	
Manufacturer: N/A	Model number: N/A	Serial number: N/A		
Construction date: N/A	Installation date: 2012	Modification date(s): N/A		
Design Capacity (examples: furnace 5,000 gal	s - tons/hr, tanks - gallons):			
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr		
Fuel Usage Data (fill out all applicat	ble fields)	•		
Does this emission unit combust fuel? Yes X No If yes, is it?				
Indirect FiredDirect Fired				
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ting of burners:	
N/A 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	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

Emissions Data				
Criteria Pollutants	Potential Emissions			
	РРН	TPY		
Carbon Monoxide (CO)				
Nitrogen Oxides (NO _X)				
Lead (Pb)				
Particulate Matter (PM _{2.5})	Soo Exhibit E 1 Emissions Summany			
Particulate Matter (PM ₁₀)	See Exhibit E-1 – Emissions Summary			
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO ₂)				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potentia	l Emissions		
	РРН	TPY		
N/A	See Exhibit E-1 -	- Emissions Summary		
Regulated Pollutants other than	Potentia	l Emissions		
	РРН	TPY		
N/A	N/A	N/A		
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,		
versions of software used, source and	dates of emission factors, etc.).			
Engineering Estimates				

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

ATTACHMENT E - Emission Unit Form			
Emission Unit Description			
Emission unit ID number: TT-2	Emission unit name: Tank Truck Loading Area	List any control devices associated with this emission unit: PTO/Scrubber (B332/C332) or Elare (B330 (7c))	
Provide a description of the emissio Claimed Confidential	n unit (type, method of operation, d	esign parameters, etc.)	:
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1984	Modification date(s): N/A	
Design Capacity (examples: furnace 5,000 gal	es - tons/hr, tanks - gallons):	1	
Maximum Hourly Throughput: N/A	Maximum Annual Throughput: Claimed Confidential	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applica	ble fields)	1	
Does this emission unit combust fue	l? Yes _XNo	If yes, is it?	
		Indirect Fired	Direct Fired
Maximum design heat input and/or	maximum horsepower rating:	Type and Btu/hr rat	ing of burners:
N/A N/A			
List the primary fuel type(s) and if a the maximum hourly and annual fu	applicable, the secondary fuel type(s el usage for each.	s). For each fuel type l	isted, provide
Describe each fuel expected to be us	ed during the term of the permit.		
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Emissions Data						
Criteria Pollutants	Potential Emissions					
	РРН	TPY				
Carbon Monoxide (CO)						
Nitrogen Oxides (NO _X)						
Lead (Pb)	See Exhibit E-1 – Emissions Summary					
Particulate Matter (PM _{2.5})						
Particulate Matter (PM ₁₀)						
Total Particulate Matter (TSP)						
Sulfur Dioxide (SO ₂)						
Volatile Organic Compounds (VOC)						
Hazardous Air Pollutants	Potentia	Potential Emissions				
	РРН	TPY				
N/A	See Exhibit E-1 – Emissions Summary					
Regulated Pollutants other than	Potential Emissions					
Criteria and HAP	РРН	TPY				
N/A	N/A	N/A				
List the method(s) used to calculate t	the potential emissions (include date	es of any stack tests conducted,				
versions of software used, source and	l dates of emission factors, etc.).					
Engineering Estimates						

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> 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.

See Attachment E-2 – Applicable Requirements

X 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.)

See Attachment E-3 – Monitoring/Testing/Recordkeeping/Reporting Requirements

Are you in compliance with all applicable requirements for this emission unit? X Yes ____No

Attachment E-1

	330A		330B		331A		332A		332C		337A		337B	
_	(lb/hr)	(TPY)												
CO			2.14	6.56					0.64	2.81				
NO _X			7.79	11					9.24	40.4				
SOx			106.6	64					1.07	4.69				
PM_{10}			2.95	2.26	0.01	0.01	0.01	0.01	0.08	0.32				
PM2.5									0.08	0.32				
VOCs	16.5	13.2	5.91	3.86					1.19	5.23	0.01	0.01	0.01	0.01
HAPs	16.4	13.1	7.44	4.47					0.95	4.17				

Emissions for Larvin Unit

Attachment E-2

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction</u> <u>permit</u> 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 following regulatory requirments are set forth in R13-0641E, with the applicable permit condition and regulatory requirement listed:

4.1. Limitations and Standards

4.1.1. Maximum allowable hourly and annual emissions from the Larvin® Process shall not exceed the limitations set forth in Table 4.1.1.

Emission Point	Pollutant	Emissio	on Limit					
		lb/hr	tpy					
330A	Total VOC	16.5	13.2					
	Total HAPs	16.4	13.1					
330B (15e)	CO	2.14	6.56					
	NO_X	7.79	11.0					
	SO_X	106.6	64.0					
	PM_{10}	2.95	2.26					
	Total VOC	5.91	3.86					
	Total HAPs	7.44	4.47					
331A	PM ₁₀	0.01	0.01					
332A	PM ₁₀	0.01	0.01					
332C	СО	0.64	2.81					
	NO _X	9.24	40.40					
	SO _X	1.07	4.69					
	PM_{10}	0.08	0.32					
	PM _{2.5}	0.08	0.32					
	Total VOC	1.19	5.23					
	Total HAPs	0.95	4.17					
337A	Total VOC	0.01	0.01					
337B	Total VOC	0.01	0.01					

Table 4.1.1. Emission Limits for Larvin Process

Note: PM10 emissions from 330B(15e) and 332C include HCl emissions as acid mist

4.1.2. The Larvin® Process shall not exceed 3.4 production units annually, on a 12-month rolling basis.

- 4.1.3. The permittee shall route subject emissions from the Larvin process as specified in the Emissions Unit Table 1.0 of this permit.
- 4.1.4. The back-up process flare [B330(7c)] is limited to 1,200 hours/year, based on a 12-month rolling average.
- 4.1.5. Flare (7c (a)) may be used only as an emergency safety flare and is not expected to be used more than once per fifteen (15) years.
- 4.1.6. The permittee shall operate the fugitive air scrubber [A330] as follows:
 - 1.1.6.1 A caustic solution in concentrations necessary to control odor shall be used for the scrubber liquor.
 - 4.1.6.2. The Permittee shall maintain a minimum liquor flow rate of 150 gal/min circulation with the flow valves fully open.
- 4.1.7. The permittee shall operate the back-up process Flare [B330 (7c)] and the emergency Flare [B330 (7c(a))] such that the flare pilot light is active during all times the flare is being used as the control device.
- 4.1.8. The permittee shall operate the PTO/Scrubber [B332/C332] as follows:
 - 4.1.8.1.The pilot light is active during all times the PTO is being used as the control device.
 - 4.1.8.2.The temperature of gases exiting the combustion chamber shall be greater than 1,750°F;
 - 4.1.8.3.The liquor flow rate of the scrubber shall be greater than 250 gpm.
- 4.1.9. The permittee shall conduct an initial compliance test of the PTO/Scrubber[B332/C332] as defined in Section 4.3 of this permit
- 4.1.10. The annual throughput for storage tanks T-37 and T-38 shall be limited to 7,130,000 gallons each on a 12-month rolling basis.
- 4.1.11. To ensure compliance with the NOX emission limit established in Table 4.1.1, the permittee shall limit the gas flow rate of the process vent gas to 3,000 lb/hr (including combustible and inert gas) on a rolling 24 hour average. This requirement shall be in affect whenever the PTO/Scrubber [B332/C332] becomes operational.
- 4.1.12. For the PTO [B332], the back-up process flare [B330(7c)], and the emergency flare [B330(7c(a))], the permittee is subject to the requirements of 45CSR6 including but not limited to the following:
 - 4.1.12.1.Particulate matter emissions from the Flare B330 (7c (a)) shall not exceed 1,009 lbs/hr. [45CSR§6-4.1.]

- 4.1.12.2.Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater. **[45CSR§6-4.3.]**
- 4.1.12.3.The provisions of Condition 4.1.11 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up. [45CSR§6-4.4.]
- 4.1.12.4.Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors. [45CSR§6-4.6]
- 4.1.13. The permittee shall not release hydrochloric acid (HCl) emissions from the PTO/Scrubber [B332/C332] or the back-up process flare [B330(7c)] in excess of 210 mg/m³. [45CSR§7-4.2]
- 4.1.14. For the PTO [B332] and the back-up process flare [B330(7c)], the permittee is subject to the requirements of 45CSR10 including but not limited to the following:
 - 4.1.14.1.No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10- 4.1. [45CSR§10-4.1]
- 4.1.15. The Larvin unit is subject to the Leak Detection and Repair (LDAR) monitoring requirements of 40CFR§63.160, Subpart H. [45CSR§21-37, CO-21-97-4, Condition III.2, CO-27-92-12, Condition III.3.]
- 4.1.16. If the emissions of any Toxic Air Pollutant are discovered that have not been addressed by the Rule 27 Consent Order, the Permittee shall notify the Director within fifteen (15) days of such discovery. Unless the Director determines these emissions to be insignificant, the Permittee shall submit a Compliance Program for control of this emission within sixty (60) days of the date of such notification. **[CO-27-92-12, Condition III.5]**
- 4.1.17. The permittee is subject to the requirements of 40C.F.R.63 Subpart MMM, (Pesticide Active Ingredient Production MACT) including but not limited to the following:

Note: For following paragraphs, any reference to "this subpart" shall mean 40C.F.R.63 Subpart MMM, any reference to "this part" shall mean 40C.F.R.Part 63.

4.1.18. Equipment Leaks:

The permittee shall comply with the provisions pertaining to fugitive volatile organic compound (VOC) emissions within 40 CFR 63, subpart H as specified in paragraphs (b)(1) through (3) of this section and with paragraph (b)(4) of this section for pressure

relief devices. When the term "process unit" is used in subpart H of this part, it shall mean any group of processes for the purposes of this subpart. Groups of processes as used in this subpart may be any individual process or combination of processes.

- Sections 63.160, 63.161, 63.162, 63.163, 63.167, 63.168, 63.170, 63.173, 63.175, 63.176, 63.181, and 63.182 of subpart H of this part shall not apply for the purposes of this subpart MMM. The owner or operator shall comply with the provisions specified in paragraphs (b)(1)(i) through (viii) of this section.
 - (i) Sections 63.160 and 63.162 of subpart H of this part shall not apply, instead the owner or operator shall comply with paragraph (a) of this section;
 - (ii) Section 63.161 of subpart H of this part shall not apply, instead the owner or operator shall comply with §63.1361;
 - (iii) Sections 63.163 and 63.173 of subpart H of this part shall not apply, instead the owner or operator shall comply with paragraph (c) of this section;
 - (iv) Section 63.167 of subpart H of this part shall not apply, instead the owner or operator shall comply with paragraph (d) of this section;
 - (v) Section 63.168 of subpart H of this part shall not apply, instead the owner or operator shall comply with paragraph (e) of this section;
 - (vi) Section 63.170 of subpart H of this part shall not apply, instead the owner or operator shall comply with §63.1362(b);
 - (vii) Section 63.181 of subpart H of this part shall not apply, instead the owner or operator shall comply with paragraph (g) of this section; and
 - (viii) Section 63.182 of subpart H of this part shall not apply, instead the owner or operator shall comply with paragraph (h) of this section.
- (2) The owner or operator shall comply with §§63.164, 63.166, 63.169, 63.177, and 63.179 of subpart H of this part in their entirety, except that when these sections reference other sections of subpart H of this part, the owner or operator shall comply with the revised sections as specified in paragraphs (b)(1), (3), and (4) of this section. Section 63.164 of subpart H of this part applies to compressors. Section 63.166 of subpart H of this part applies to sampling connection systems. Section 63.169 of subpart H of this part applies to: pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service. Section 63.177 of subpart H of this subpart applies to general alternative means of emission limitation. Section 63.179 of subpart H of this part applies to alternative means of emission limitation for enclosed-vented process units.
- (3) The owner or operator shall comply with §§63.171, 63.172, 63.174, 63.178, and 63.180 of subpart H of this part with the differences specified in paragraphs (b)(3)(i) through (v) of this section.
 - (i) Section 63.171, Delay of repair, shall apply except §63.171(a) shall not apply. Delay of repair of equipment for which leaks have been detected is allowed if one of the following conditions exist:

- (A) The repair is technically infeasible without a process shutdown. Repair of this equipment shall occur by the end of the next scheduled process shutdown.
- (B) The owner or operator determines that repair personnel would be exposed to an immediate danger if attempting to repair without a process shutdown. Repair of this equipment shall occur by the end of the next scheduled process shutdown.
- (ii) Section 63.172, Closed-vent systems and control devices, shall apply for closed-vent systems used to comply with this section, and for control devices used to comply with this section only, except:
 - (A) Section 63.172k) and (l) shall not apply. The owner or operator shall instead comply with paragraph (f) of this section.
 - (B) Owners or opertors may, instead of complying with the provisions of §63.172(f), design a closed-vent system to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the associated control device is operating.
- (iii) Section 63.174, Connectors, shall apply except:
 - (A) Section 63.174(b), (f), (g), and (h) shall not apply. In place of §63.174(b), the owner or operator shall comply with paragraphs (b)(3)(iii)(C) through (G) of this section. In place of §63.174(f), (g), and (h), the owner or operator shall comply with paragraph (f) of this section.
 - (B) Days that the connectors are not in organic HAP service shall not be considered part of the 3-month period in §63.174(c).
 - (C) If the percent leaking connectors in a group of processes was greater than or equal to 0.5 percent during the initial monitoring period, monitoring shall be performed once per year until the percent leaking connectors is less than 0.5 percent.
 - (D) If the percent leaking connectors in the group of processes was less than 0.5 percent, but equal to or greater than 0.25 percent, during the last required monitoring period, monitoring shall be performed once every 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first 2 years and the remainder of the connectors within the next years. The percent leaking connectors will be calculated for the total of all monitoring performed during the 4-year period.
 - (E) The owner or operator shall increase the monitoring frequency to once every 2 years for the next monitoring period if leaking connectors comprise at least 0.5 percent but less than 1.0 percent of the connectors monitored within either the 4 years specified in paragraph (b)(3)(iii)(D) of

this section, the first 4 years specified in paragraph (b)(3)(iii)(G) of this section, or the entire 8 years specified in paragraph (b)(3)(iii)(G) of this section. At the end of that 2-year monitoring period, the owner or operator shall monitor once per year while the percent leaking connectors is greater than or equal to 0. percent; if the percent leaking connectors is less than 0.5 percent, the owner or operator may again elect to monitor in accordance with paragraph (b)(3)(iii)(D) or (G) of this section, as applicable.

- (F) If an owner or operator complying with the requirements of paragraph (b)(3)(iii)(D) or (G) of this section for a group of processes determines that 1 percent or greater of the connectors are leaking, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii)(D) or (G) of this section after a monitoring period in which less than 0.5 percent of the connectors are determined to be leaking.
- (G) Monitoring shall be required once every 8 years, if the percent leaking connectors in the group of process units was less than 0.25 percent during the last required monitoring period. An owner or operator shall monitor at least 50 percent of the connectors in the first 4 years and the remainder of the connectors within the next 4 years. If the percent leaking connectors in the first 4 years is equal to or greater than 0.35 percent, the monitoring program shall revert at that time to the appropriate monitoring frequency specified in paragraph (b)(3)(iii)(D), (E), or (F) of this section.
- (iv) Section 63.178, shall apply, except as specified in paragraphs (b)(3)(iv)(A) and (B) of this section.
 - (A) Section 63.178(b), requirements for pressure testing, shall apply to all processes, not just batch processes.
 - (B) For pumps, the phrase "at the frequencies specified in Table 1 of this subpart" in §63.178(c)(3)(iii) shall mean "quarterly" for the purposes of this subpart.
- (v) Section 63.180 of subpart H of this part, Test methods and procedures, shall apply except §63.180(b)(4)(ii)(A) through (C) of subpart H of this part shall not apply. Calibration gases shall be a mixture of methane and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators, 2,000 parts per million for pumps, and 500 parts per million for all other equipment, except as provided in §63.180(b)(4)(iii) of subpart H of this part.
- (4) Requirements for pressure relief devices. Except as specified in paragraph (b)(4)(iv) of this section, the owner or operator must comply with the operating and pressure release requirements specified in paragraphs (b)(4)(i) and (ii) of this section for pressure relief devices in organic HAP gas or vapor service. Except as specified in paragraph (b)(4)(iv) of this section, the owner or operator must also comply with the

pressure release management requirements specified in paragraph (b)(4)(iii) of this section for all pressure relief devices in organic HAP service. [45CSR34, 40CFR§63.1363 (b) (Fugitive Emissions)]

- 4.1.19. Process Vents [E480, B330(7c), and B332/C332]:
 - (a) The Permittee shall control HAP emissions to the levels specified in this section and in §63.1363, as summarized in Table 2 of this subpart.
 - (b) Process Vents.
 - (1) The owner or operator of an existing source shall comply with the requirements of paragraphs (b)(2) and (b)(3) of this section. Compliance with paragraphs (b)(2) through (b)(3) of this section shall be demonstrated through the applicable test methods in 40CFR§63.1365 and the monitoring requirements in 40CFR§63.1366.
 - (2) Organic HAP emissions from existing sources. The owner or operator of an existing affected source must comply with the requirements in either paragraph (b)(2)(i) of this section or with the requirements in paragraphs (b)(2)(ii) through (iv) of this section.
 - (i) The uncontrolled organic HAP emission rate shall not exceed 0.15 Mg/yr the sum of all process vents within a process.
 - (ii) (A) Except as provided in paragraph (b)(2)(ii)(B) of this section, uncontrolled organic HAP emissions from a process vent shall be reduced by 98 percent by weight or greater if the flowweighted average flowrate for the vent as calculated using Equation 1 of this subpart is less than or equal to the flowrate calculated using Equation 2 of this subpart.

$$FR_a = \underbrace{\sum_{i=1}^{n} (D_i)(FR_i)}_{\sum_{i=1}^{n} D_i}$$
Equation 1

FR = 0.02 x (HL) - 1,000

Equation 2

Where:

- FR_a = flow-weighted average flowrate for the vent, scfm
- D_i = duration of each emission event, min
- FR_i = flowrate of each emission event, scfm
- n = number of emission events
- FR = flowrate, scfm
- HL= annual uncontrolled organic HAP emissions, lb/yr, as defined in 40CFR§63.1361

- (B) If the owner or operator can demonstrate that a control device, installed on or before November 10, 1997 on a process vent otherwise subject to the requirements of paragraph (b)(2)(ii)(A) of this section, before requirements of paragraph (b)(2)(ii)(A) of this reduces inlet emissions of total organic HAP by greater than or equal to 90 percent by weight but less than 98 percent by weight, then the control device must be operated to reduce inlet emissions of total organic HAP by 90 percent by weight or greater.
- (iii) Excluding process vents that are subject to the requirements in paragraph (b)(2)(ii) of this section, uncontrolled organic HAP emissions from the sum of all process vents within a process shall be reduced by 90 percent or greater by weight.
- (iv) As an alternative to the requirements in paragraphs (b)(2)(ii) and (iii) of this section, uncontrolled organic HAP emissions from any process vent may be reduced in accordance with any of the provisions in paragraphs (b)(2)(iv)(A) through (D) of this section. All remaining process vents within a process must be controlled in accordance with paragraphs (b)(2)(ii) and (iii) of this section.
 - (A) To outlet concentrations less than or equal to 20 ppmv; or
 - (B) By a flare that meets the requirements of 40CFR§63.11(b); or
 - (C) By a control device specified in 40CFR§63.1365(a)(4); or
 - (D) In accordance with the alternative standard specified in paragraph (b)(6) of this section.
- (3) HCl and Cl2 emissions from existing sources. For each process, the owner or operator of an existing source shall comply with the requirements of either paragraph (b)(3)(i) or (ii) of this section.
 - (i) The uncontrolled HCl and Cl2 emissions, including HCl generated from the combustion of halogenated process vent emissions, from the sum of all process vents within a process shall not exceed 6.8 Mg/yr.
 - (ii) HCl and Cl2 emissions, including HCl generated from combustion of halogenated process vent emissions, from the sum of all process vents within a process shall be reduced by 94 percent or greater or to outlet concentrations less than or equal to 20 ppmv.
- (6) Alternative standard. As an alternative to the provisions in paragraphs (b)(2) of this section, the owner or operator may route emissions from a process vent to a combustion control device achieving an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 20 ppmv or less. If the owner or operator is routing emissions to a non-combustion control device or series of control devices, the control device(s) must achieve an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 50 ppmv or less. Any process vents within a process that are not routed to such a control device or series of control devices must be controlled

in accordance with the provisions of paragraph (b)(2)(ii), (iii), (iv), or (b)(3)(ii), of this section, as applicable. [45CSR34, 40CFR§63.1362(b)]

4.1.20. Storage Vessels [T24 and T25]:

The Permittee shall control HAP emissions to the levels specified in this section and in §63.1363, as summarized in Table 2 of this subpart.

- (c) Storage Vessels.
 - (1) The owner or operator shall either determine the group status of a storage vessel or designate it as a Group 1 storage vessel. If the owner or operator elects to designate the storage vessel as a Group 1 storage vessel, the owner or operator is not required to determine the maximum true vapor pressure of the material stored in the storage vessel.
 - (2) Standard for existing sources. Except as specified in paragraphs (c)(4), (5), and (6) of this section, the owner or operator of a Group 1 storage vessel at an existing affected source, as defined in 40CFR§63.1361, shall equip the affected storage vessel with one of the following:
 - (i) A fixed roof and internal floating roof, or
 - (ii) An external floating roof, or
 - (iii) An external floating roof converted to an internal floating roof, or
 - (iv) A closed vent system meeting the conditions of 40CFR§63.1362(j) (paragraph (j) of Condition 4.1.18) and a control device that meets any of the following conditions:
 - (A) Reduces organic HAP emissions by 95 percent by weight or greater; or
 - (B) Reduces organic HAP emissions to outlet concentrations of 20 ppmv or less; or
 - (C) Is a flare that meets the requirements of 40CFR§63.11(b); or
 - (D) Is a control device specified in 40CFR§63.1365(a)(4).
 - (3) Standard for new sources. Except as specified in paragraphs (c)(4), (5), and (6) of this Condition, the owner or operator of a Group 1 storage vessel at a new source, as defined in 40CFR§63.1361, shall equip the affected storage vessel in accordance with any one of paragraphs (c)(2)(i) through (iv) of this Condition.
 - (4) Alternative standard. As an alternative to the provisions in paragraphs (c)(2) and (3) of this section, the owner or operator of an existing or new affected source may route emissions from storage vessels to a combustion control device achieving an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 20 ppmv or less, and an outlet concentration of hydrogen chloride and chlorine of 20 ppmv or less. If the owner or operator is routing emissions to a non-combustion control device or series of control devices, the control device(s) must achieve an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 50 ppmv or less.

- (5) Planned routine maintenance. The owner or operator is exempt from the specifications in paragraphs (c)(2) through (4) of this section during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. The owner or operator may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage vessel between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded.
- (6) Vapor balancing alternative. As an alternative to the requirements in paragraphs (c)(2) and (3) of this section, the owner or operator of an existing or new affected source may implement vapor balancing in accordance with paragraphs (c)(6)(i) through (vii) of this section.
 - (i) The vapor balancing system must be designed and operated to route organic HAP vapors displaced from loading of the storage tank to the railcar or tank truck from which the storage tank is filled.
 - (ii) Tank trucks and railcars must have a current certification in accordance with the U.S. Department of Transportation pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars.
 - (iii) Hazardous air pollutants must only be unloaded from tank trucks or railcars when vapor collection systems are connected to the storage tank's vapor collection system.
 - (iv) No pressure relief device on the storage tank or on the railcar or tank truck shall open during loading or as a result of diurnal temperature changes (breathing losses).
 - (v) Pressure relief devices on affected storage tanks must be set to no less than 2.5 psig at all times to prevent breathing losses. The owner or operator shall record the setting as specified in 40CFR§63.1367(b)(8) and comply with the following requirements for each pressure relief valve:
 - (A) The pressure relief valve shall be monitored quarterly using the method described in Sec. 40CFR§63.180(b).
 - (B) An instrument reading of 500 ppmv or greater defines a leak.
 - (C) When a leak is detected, it shall be repaired as soon as practicable, but no later than 5 days after it is detected, and the owner or operator shall comply with the recordkeeping requirements of 40CFR§63.1363(g)(4)(i) through (iv).
 - (vi) Railcars or tank trucks that deliver HAP to an affected storage tank must be reloaded or cleaned at a facility that utilizes one of the following control techniques:

- (A) The railcar or tank truck must be connected to a closed vent system with a control device that reduces inlet emissions of HAP by 90 percent by weight or greater; or
- (B) A vapor balancing system designed and operated to collect organic HAP vapor displaced from the tank truck or railcar during reloading must be used to route the collected HAP vapor to the storage tank from which the liquid being transferred originated.
- (vii) The owner or operator of the facility where the railcar or tank truck is reloaded or cleaned must comply with the following requirements:
 - (A) Submit to the owner or operator of the affected storage tank and to the Administrator a written certification that the reloading or cleaning facility will meet the requirements of this section. The certifying entity may revoke the written certification by sending a written statement to the owner or operator of the affected storage tank giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the requirements of this paragraph (c)(6)(vii)(A).
 - (B) If complying with paragraph (c)(6)(vi)(A) of this section, demonstrate continuous compliance in accordance with 40CFR§63.1366, keep records as specified in 40CFR§63.1367, and prepare reports as specified in 40CFR§63.1368.
 - (C) If complying with paragraph (c)(6)(vi)(B) of this section, keep records of:
 - (1) The equipment to be used and the procedures to be followed when reloading the railcar or tank truck and displacing vapors to the storage tank from which the liquid originates, and
 - (2) Each time the vapor balancing system is used to comply with paragraph (c)(6)(vi)(B) of this section.
 - (7) Compliance with the provisions of paragraphs (c)(2) and (3) of this section is demonstrated using the monitoring requirements in 40CFR§63.1366. Compliance with the outlet concentrations in paragraph (c)(4) of this section shall be determined by the continuous emission monitoring requirements of 40CFR§63.1366(b)(5).
 [45CSR34, 40CFR§63.1362(c)]

4.1.21. Closed-vent Systems:

The Permittee shall control HAP emissions to the levels specified in this section and in §63.1363, as summarized in Table 2 of this subpart.

(j) Closed-vent systems. The owner or operator of a closed-vent system that contains bypass lines that could divert a vent stream away from a control device used to comply with the requirements in paragraphs (b) through (c) of 40CFR§63.1362 (Condition 4.1.16 and 4.1.17 of this Permit) shall comply with the requirements of Table 3 of this subpart and paragraph (j)(1) or (2) of this section. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, rupture disks and pressure relief valves needed for safety purposes are not subject to this paragraph.

- (1) Install, calibrate, maintain, and operate a flow indicator that determines whether vent stream flow is present at least once every 15 minutes. Records shall be maintained as specified in 40CFR§63.1367(f)(1). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or
- (2) Secure the bypass line valve in the closed position with a car seal or lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Records shall be maintained as specified in 40CFR§63.1367(f)(2). [45CSR34, 40CFR§63.1362(j)]
- 4.1.22. Opening of a safety device. The owner or operator that opens a safety device, as defined in §63.1361, is not exempt from applicable standards in order to avoid unsafe conditions. If opening a safety device results in the failure to meet any applicable standard, the owner or operator must still comply with the general duty to minimize emissions. If opening a safety device results in a deviation or excess emissions, such events must be reported as specified in §63.1368(i). If the owner or operator attributes the event to a malfunction and intends to assert an affirmative defense, the owner or operator is subject to §63.1360(k). [45CSR34, 40CFR§63.1362(i)]
- 4.1.23. Affirmative defense for violation of emission standards during malfunction. In response to an action to enforce the standards set forth in this subpart, the owner or operator may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed if the owner or operator fails to meet their burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.
 - (1) Assertion of affirmative defense. To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements in paragraph (k)(2) of this section, and must prove by a preponderance of evidence that:
 - (i) The violation:
 - (A) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and
 - (B) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

- (C) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
- (D) Was not part of a recurring pattern indicative of inadequate design, operation, ormaintenance; and
- (ii) Repairs were made as expeditiously as possible when a violation occurred; and
- (iii) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
- (iv) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
- (v) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and
- (vi) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
- (vii) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and
- (viii) At all times, the affected source was operated in a manner consistent with good for minimizing emissions; and
- (ix) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.
- (2) Report. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator, with all necessary supporting documentation, that explains how it has met the requirements set forth in paragraph (k)(1) of this section. This affirmative defense report shall be included in the first periodic compliance report, deviation report, or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation after the initial occurrence of the violation report or excess emission report due after the initial occurrence of the violation for excess emission report of the violation for excess emission report after the initial occurrence of the violation for excess emission report due after the initial occurrence of the violation for excess emission report due after the initial occurrence of the violation of the relevant standard. [45CSR34, 40CFR§63.1360(k)]

- 4.1.24. Compliance Dates. The permittee shall be in compliance with the applicable requirements of 40 CFR 63, Subpart MMM for existing, new, and reconstructed sources in accordance with § 63.1364 and defined below.
 - (a) Compliance dates for existing sources.
 - (1) An owner or operator of an existing affected source must comply with the provisions in this subpart (except §63.1363(b)(4)(iii)) by December 23, 2003. Compliance with the pressure relief device monitoring provisions of §63.1363(b)(4)(iii) shall occur no later than March 27, 2017.
 - (2) Pursuant to section 112(i)(3)(B) of the CAA, an owner or operator of an existing source may request an extension of up to 1 additional year to comply with the provisions of this subpart if the additional time is needed for the installation of controls.
 - (i) For purposes of this subpart, a request for an extension shall be submitted no later than 120 days prior to the compliance date specified in paragraph (a)(1) of this section, except as provided in paragraph (a)(2)(ii) of this section. The dates specified in §63.6(i) of subpart A of this part for submittal of requests for extensions shall not apply to sources subject to this subpart.
 - (ii) An owner or operator may submit a compliance extension request after the date specified in paragraph (a)(1)(i) of this section provided the need for the compliance extension arose after that date and before the otherwise applicable compliance date, and the need arose due to circumstances beyond reasonable control of the owner or operator. This request shall include the data described in §63.6(i)(8)(A), (B), and (D) of subpart A of this part.
 - (b) Compliance dates for new and reconstructed sources. An owner or operator of a new or reconstructed affected source must comply with the provisions of this subpart (except §63.1363(b)(4)(iii)) on June 23, 1999 or upon startup, whichever is later. New or reconstructed affected sources that commenced construction after November 10, 1997, but on or before January 9, 2012, must be in compliance with the pressure relief device monitoring provisions of §63.1363(b)(4)(iii) no later than March 27, 2017. New or reconstructed sources that commenced construction after January 9, 2012, must be in compliance with the pressure relief device monitoring provisions of §63.1363(b)(4)(iii) no later than March 27, 2017. New or reconstructed sources that commenced construction after January 9, 2012, must be in compliance with the pressure relief device monitoring provisions of §63.1363(b)(4)(iii) upon initial startup or by March 27, 2014, whichever is later.
- 4.1.25. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment 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. [45CSR§13-5.11.]

Attachment E-3

Monitoring/Testing/Recordkeeping/Reporting Requirements

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.)

The following regulatory requirements are set forth in R13-0641E, with the applicable permit condition and regulatory requirement listed:

4.2. Monitoring Requirements

- 4.2.1. For purposes of demonstrating compliance with condition 4.1.6 for the fugitive air scrubber [A330], the permittee shall:
 - a. continuously monitor the liquor flow rate and maintain a minimum circulation flow rate of 150 gpm with valves fully open;
 - b. Use a low flow alarm to continuously measure the circulation flow rate. The alarm will be set to activate if there is flow below 150 gpm;
 - c. monitor the caustic solution concentration as necessary to control odors.
- 4.2.2. For purposes of demonstrating compliance with conditions 4.1.4 and 4.1.7 for the backup process flare [B330 (7c)], the permittee shall :
 - a. provide continuous monitoring of the pilot light flame to ensure that it is active at all times the flare is used as a control device;
 - b. monitor the vent gas hours that the back-up process flare is used as a control device;
 - c. monitor opacity as outlined in condition 4.2.8.
- 4.2.3. For purposes of demonstrating compliance with conditions 4.1.5 and 4.1.7 for the emergency flare [B330(7c(a))], the permittee shall:
 - a. provide continuous monitoring of the pilot light flame to ensure that it is active at all times the flare is used as a control device;
 - b. monitor the vent gas hours that the back-up process flare is used as a control device;
 - c. monitor opacity as outlined in condition 4.2.8.
- 4.2.4. For purposes of demonstrating compliance with the particulate matter emission limits of condition 4.1.1 for the baghouses (3c [A331] and 5c [A332]), the permittee shall:
 - a. material balances around the baghouse;

- b. monitor the pressure drop across the baghouse monthly.
- 4.2.5. For purposes of demonstrating compliance with condition 4.1.8 for the PTO/Scrubber [B332/C332], the permittee shall:
 - a. provide continuous monitoring of the pilot light flame to ensure that it is active at all times the PTO is used as a control device;
 - b. Monitor the temperature of gases existing the combustion chamber every 15 minutes to maintain a minimum temperature of 1,750°F;
 - c. monitor opacity as outlined in condition 4.2.8.
 - d. monitor the liquor flow rate every 15 minutes and maintain a minimum flow rate of 250 gpm.
- 4.2.6. For the purpose of demonstrating compliance with the process vent gas flow rate limitation in condition 4.1.11, the permittee shall provide continuous monitoring of the total flow rate of the vent gas header prior to being routed to the designated control device.
- 4.2.7. For purposes of demonstrating compliance with the throughput limits provided in condition 4.1.10 of this permit, the permittee shall monitor the throughput of material through Tanks T-37 and T-38 on a monthly and annual basis.
- 4.2.8. For purposes of demonstrating compliance with the opacity limits in condition 4.1.12 of this permit, the permittee shall conduct visible emission checks of each emission point subject to an opacity limit once per month during periods of normal unit operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with 40 C.F.R. 60 Appendix A, Method 9 within 48 hours. If the Method 9 test results show the opacity to be greater than the limit, then an evaluation to determine the cause of the exceedance shall be conducted within three (3) days, unless the cause of the exceedance is corrected within 24 hours. If no visible emissions are observed after four consecutive months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained in accordance with Condition 3.4.2 of this permit and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9 test, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken. During the time that Flare (7c (a)) is in operation, the permittee shall immediately perform a Method 22 observation. If visible emissions occur, the permittee shall immediately perform a Method 9 test.
- 4.2.9. Control Device Monitoring: [B330 (7c), E480, B332/C332]
 - (a) To provide evidence of continued compliance with the standard, the owner or

operator of any existing or new affected source shall install, operate, and maintain monitoring devices as specified in this section. During the initial compliance demonstration, maximum or minimum operating parameter levels, or other design and operating characteristics, as appropriate, shall be established for emission sources that will indicate the source is in compliance. Test data, calculations, or information from the evaluation of the control device design, as applicable, shall be used to establish the operating parameter level or characteristic.

- (b) Monitoring for control devices.
 - (1) Parameters to monitor. Except as specified in paragraph (b)(1)(i) of this section, for each control device, the owner or operator shall install and operate monitoring devices and operate within the established parameter levels to ensure continued compliance with the standard. Monitoring parameters are specified for control scenarios in paragraphs (b)(1)(ii) of this section, and are summarized in Table 3 of this subpart.
 - (i) Periodic verification. For control devices that control vent streams containing total HAP emissions less than 0.91 Mg/yr, before control, monitoring shall consist of a periodic verification that the device is operating properly. This verification shall include, but not be limited to, a daily or more frequent demonstration that the unit is working as designed and may include the daily measurements of the parameters described in paragraphs (b)(1)(ii) of this section. This demonstration shall be included in the pre-compliance plan, to be submitted 6 months prior to the compliance date of the standard.
 - (ii) Scrubbers. For affected sources using liquid scrubbers, the owner or operator shall establish a minimum scrubber liquid flow rate or pressure drop as a site-specific operating parameter which must be measured and recorded at least once every 15 minutes during the period in which the scrubber is controlling HAP from an emission stream as required by the standards in Sec. 63.1362. If the scrubber uses a caustic solution to remove acid emissions, the pH of the effluent scrubber liquid shall also be monitored once a day. The minimum scrubber liquid flow rate or pressure drop shall be based on the conditions under which the initial compliance demonstration was conducted. Alternatively, for halogen scrubbers, the owner or operator may comply with the requirements specified in §63.994(c).
 - (A) The monitoring device used to determine the pressure drop shall be certified by the manufacturer to be accurate to within a gage pressure of 10 percent of the maximum pressure drop measured.
 - (B) The monitoring device used for measurement of scrubber liquid flowrate shall be certified by the manufacturer to be accurate to within 10 percent of design scrubber liquid flowrate.
 - (C) The monitoring device shall be calibrated annually.

(vi)Flares. For each flare, the presence of the pilot flame shall be monitored at
least every 15 minutes during the period in which the flare is controlling HAP from an emission stream subject to the standards in Sec. 63.1362. The monitoring device shall be calibrated annually.

- (vii) Thermal incinerators. For each thermal incinerator, the owner or operator shall monitor the temperature of the gases exiting the combustion chamber as the site-specific operating parameter which must be measured and recorded at least once every 15 minutes during the period in which the combustion device is controlling HAP from an emission stream subject to the standards in §63.1362.
 - (A) The temperature monitoring device must be accurate to within ± 0.75 percent of the temperature measured in degrees Celsius or ± 2.5 °C, whichever is greater.
 - (B) The monitoring device must be calibrated annually.

(ix) Process heaters and boilers.

- (A) Except as specified in paragraph (b)(1)(ix)(B) of this section, for each boiler or process heater, the owner or operator shall monitor the temperature of the gases exiting the combustion chamber as the site-specific operating parameter which must be monitored and recorded at least every 15 minutes during the period in which the boiler or process heater is controlling HAP from an emission stream subject to the standards in Sec. 63.1362.
 - (1) The temperature monitoring device must be accurate to within 0.75 percent of the temperature measured in degrees Celsius or 2.5 degrees Celsius, whichever is greater.
 - (2) The temperature monitoring device must be calibrated annually.
 - (B) The owner or operator is exempt from the monitoring requirements specified in paragraph (b)(1)(ix)(A) of this section if either:
 - (1) All vent streams are introduced with primary fuel; or
 - (2) The design heat input capacity of the boiler or process heater is 44 megawatts or greater.

[45CSR34, 40CFR§63.1366(a) and (b)]

4.3. Testing Requirements

4.3.1. At such reasonable times as the Secretary may designate, the permittee shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 or other equivalent U.S. EPA approved method approved by the Secretary, in exhaust gases. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner

acceptable to the Secretary. The Secretary may, at the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. **[45CSR6-7.1]**

- 4.3.2. The permittee is subject to the initial testing requirements for the PTO/Scrubber [B332/C332]. [45CSR34, 40CFR§ 63.1365 (Subpart MMM)]
- 4.3.3. The permittee is subject to the testing requirements for the Group 1 storage tanks that are vented to the PTO/Scrubber [B332/C332]. [45CSR34, 40CFR§ 63.1365 (Subpart MMM)]
- 4.3.4. Test methods and initial compliance procedures. [B332/C332]
 - (a) General. Except as specified in paragraph (a)(4) of this section, the procedures specified in paragraphs (c), (d), (e), (f), and (g) of this section are required to demonstrate initial compliance with §63.1362(b), (c), (d), (f), and (g), respectively. The provisions in paragraph (a)(1) of this section apply to design evaluations that are used to demonstrate compliance with the standards for process vents and storage vessels. The provisions in paragraph (a)(2) of this section apply to performance tests that are specified in paragraphs (c), (d), and (e) of this section. The provisions in paragraph (a)(3) of this section describe initial compliance procedures for flares. The provisions in paragraph (a)(5) of this section are used to demonstrate initial compliance with the alternative standards specified in (63.1362)(b)(6) and (c)(4). The provisions in paragraph (a)(6) of this section are used to comply with the outlet requirements specified concentration in §63.1362(b)(2)(iv)(A), (b)(3)(ii),(b)(4)(ii)(A), (b)(5)(ii), and (b)(5)(iii).
 - (1) Design evaluation. To demonstrate that a control device meets the required control efficiency, a design evaluation must address the composition and HAP concentration of the vent stream entering the control device. A design evaluation also must address other vent stream characteristics and control device operating parameters as specified in any one of paragraphs (a)(1)(i) through (vii) of this section, depending on the type of control device that is used. If the vent stream is not the only inlet to the control device, the efficiency demonstration also must consider all other vapors, gases, and liquids, other than fuels, received by the control device.
 - (i) For an enclosed combustion device used to comply with the provisions of §63.1362(b)(2)(iv), (b)(4)(ii), (c)(2)(iv)(B), or (c)(3) with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C, the design evaluation must document that these conditions exist.
 - (ii) For a combustion control device that does not satisfy the criteria in paragraph
 (a)(1)(i) of this section, the design evaluation must document control efficiency and address the following characteristics, depending on the type of

control device: (A) For a thermal vapor incinerator, the design evaluation must consider the autoignition temperature of the organic HAP, must consider the vent stream flowrate, and must establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

- (vi)For a scrubber, the design evaluation must consider the vent stream composition, constituent concentrations, liquid-to-vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation must establish the design exhaust vent stream organic compound concentration level and must include the additional information in paragraphs (a)(1)(vi)(A) and (B) of this section for trays and a packed column scrubber.
 - (A) Type and total number of theoretical and actual trays;
 - (B) Type and total surface area of packing for entire column, and for individual packed sections if column contains more than one packed section.
- (2) Calculation of TOC or total organic HAP concentration. The TOC concentration or total organic HAP concentration is the sum of the concentrations of the individual components. If compliance is being determined based on TOC, the owner or operator shall compute TOC for each run using Equation 6 of this subpart. If compliance is being determined based on total organic HAP, the owner or operator shall compute total organic HAP using Equation 6 of this subpart, except that only organic HAP compounds shall be summed; when determining compliance with the wastewater provisions of §63.1362(d), the organic HAP compounds shall consist of the organic HAP compounds in Table 9 of subpart G of this part.

$$CG_{T} = \frac{1}{m} \sum_{j=1}^{m} \left(\sum_{i=1}^{n} CGS_{i,j} \right) \quad (Eq. 6)$$

Where:

 CG_T = total concentration of TOC or organic HAP in vented gas stream, average of samples, dry basis, ppmv

CGSi,j= concentration of sample components in vented gas stream for sample j, dry basis, ppmv

n = number of compounds in the sample

m = number of samples in the sample run.

- (3) Initial compliance using flares. When a flare is used to comply with the standards, the owner or operator shall comply with the provisions in §63.11(b) of Subpart A of this part.
 - (i) The initial compliance determination shall consist of a visible emissions determination using Method 22 of 40 CFR part 60, appendix A, as described in §63.11(b)(4) of subpart A of this part, and a determination of net heating value of gas being combusted and exit velocity to comply with the

requirements of 63.11(b)(6) through (8) of subpart A of this part. The net heating value and exit velocity shall be based on the results of performance testing under the conditions described in paragraphs (b)(10) and (11) of this section.

- (ii) An owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration when a flare is used.
- (b) Test methods and conditions. When testing is conducted to measure emissions from an affected source, the test methods specified in paragraphs (b)(1) through (9) of this section shall be used. Compliance and performance tests shall be performed under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested and as specified in paragraphs (b)(10) and (11) of this section. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
 - (1) Method 1 or 1A of appendix A of 40 CFR part 60 shall be used for sample and velocity traverses.
 - (2) Method 2, 2A, 2C, or 2D of appendix A of 40 CFR part 60 shall be used for velocity and volumetric flow rates.
 - (3) Method 3 of appendix A of 40 CFR part 60 shall be used for gas analysis.
 - (4) Method 4 of appendix A of 40 CFR part 60 shall be used for stack gas moisture.
 - (5) Concentration measurements shall be adjusted to negate the dilution effects of introducing nonaffected gaseous streams into the vent streams prior to control or measurement. The following methods are specified for concentration measurements of organic compounds:
 - (i) Method 18 of appendix A of 40 CFR part 60 may be used to determine HAP concentration in any control device efficiency determination.
 - (ii) Method 25 of appendix A of 40 CFR part 60 may be used to determine total gaseous nonmethane organic concentration for control efficiency determinations in combustion devices.
 - (iii)Method 25A of appendix A of 40 CFR part 60 may be used to determine the HAP or TOC concentration for control device efficiency determinations under the conditions specified in Method 25 of appendix A of 40 CFR part 60 for direct measurement of an effluent with a flame ionization detector, or in demonstrating compliance with the 20 ppmv TOC outlet standard. If Method 25A of appendix A of 40 CFR part 60 is used to determine the concentration of TOC for the 20 ppmv standard, the instrument shall be calibrated on methane or the predominant HAP. If calibrating on the predominant HAP, the

use of Method 25A of appendix A of 40 CFR part 60 shall comply with paragraphs (b)(5)(i)(A) through (C) of this section:

- (A) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A, shall be the single organic HAP representing the largest percent by volume.
- (B) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.
- (C) The span value of the analyzer must be less than 100 ppmv.
- (6) The methods in either paragraph (b)(6)(i) or (ii) of this section shall be used to determine the concentration, in mg/dscm, of total HCl and chlorine. Concentration measurements shall be adjusted to negate the dilution effects of introducing nonaffected gaseous streams into the vent streams prior to control or measurement.
 - (i) Method 26 or 26A of 40 CFR part 60, appendix A.
 - (ii) Any other method if the method or data have been validated according to the applicable procedures of Method 301 of appendix A of this part.
- (7) Method 5 of appendix A of 40 CFR part 60 shall be used to determine the concentration of particulate matter in exhaust gas streams from bag dumps and product dryers.
- (8) Wastewater analysis shall be conducted in accordance with §63.144(b)(5)(i) through (iii) or as specified in paragraph (b)(8)(i) or (ii) of this section.
 - (i) As an alternative to the methods specified in §63.144(b)(5)(i), an owner or operator may conduct wastewater analyses using Method 1666 or 1671 of 40 CFR part 136, appendix A, and comply with the sampling protocol requirements specified in §63.144(b)(5)(ii). The validation requirements specified in §63.144(b)(5)(iii) do not apply if an owner or operator uses Method 1666 or 1671 of 40 CFR part 136, appendix A.
 - (ii) As an alternative to the methods specified in §63.144(b)(5)(i), an owner or operator may use procedures specified in Method 8260 or 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW–846, Third Edition, September 1986, as amended by Update I, November 15, 1992. An owner or operator also may use any more recent, updated version of Method 8260 or 8270 approved by EPA. For the purpose of using Method 8260 or 8270 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with either Section 8 of Method 8260 or Method 8270. This program must include the elements related to measuring the concentrations of volatile compounds that are specified in paragraphs (b)(8)(ii)(A) through (C) of this section.

- (A) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps.
- (B) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.
- (C) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the material source before or during sampling with compounds having similar chemical characteristics to the target analytes.
- (9) Method 22 of appendix A of 40 CFR part 60 shall be used to determine visible emissions from flares.
- (10)Testing conditions for continuous processes. Testing of process vents on equipment operating as part of a continuous process shall consist of three one-hour runs. Gas stream volumetric flow rates shall be measured every 15 minutes during each 1-hour run. Organic HAP concentration shall be determined from samples collected in an integrated sample over the duration of each one-hour test run, or from grab samples collected simultaneously with the flow rate measurements (every 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. For continuous gas streams, the emission rate used to determine compliance shall be the average emission rate of the three test runs.
- (11)Testing conditions for batch processes. Testing of emissions on equipment where the flow of gaseous emissions is intermittent (batch operations) shall be conducted at absolute peak-case conditions or hypothetical peak-case conditions, as specified in paragraphs (b)(11)(i) and (ii) of this section, respectively. Gas stream volumetric flow rates shall be measured at 15-minute intervals. Organic HAP, TOC, or HCl and chlorine concentration shall be determined from samples collected in an integrated sample over the duration of the test, or from grab samples collected simultaneously with the flow rate measurements (every 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. In all cases, a site-specific test plan shall be submitted to the Administrator for approval prior to testing in accordance with §63.7(c). The test plan shall include the emissions profile described in paragraph (b)(11)(iii) of this section. The term "HAP mass loading" as used in paragraphs (b)(11)(i) through (iii) of this section refers to the class of HAP, either organic or HCl and chlorine, that the control device is intended to control.
 - (i) Absolute peak-case. If the most challenging conditions for the control device occur under maximum HAP load, the absolute peak-case conditions shall be characterized by the criteria presented in paragraph (b)(11)(i)(A) or (B) of this

section. Otherwise, absolute peak-case conditions are defined by the conditions in paragraph (b)(11)(i)(C) of this section.

- (A) The period in which the inlet to the control device will contain at least 50 percent of the maximum HAP mass load that may be vented to the control device over any 8-hour period. An emission profile as described in paragraph (b)(11)(iii)(A) of this section shall be used to identify the 8hour period that includes the maximum projected HAP load.
- (B) A 1-hour period of time in which the inlet to the control device will contain the highest hourly HAP mass loading rate that may be vented to the control device. An emission profile as described in paragraph (b)(11)(iii)(A) of this section shall be used to identify the 1-hour period of maximum HAP loading.
- (C) The period of time when a condition other than the maximum HAP load is most challenging for the control device. These conditions include, but are not limited to the following:
 - Periods when the streams contain the highest combined VOC and HAP hourly load, as described by the emission profiles in paragraph (b)(11)(iii) of this section; or
 - (2) Periods when the streams contain HAP constituents that approach the limits of solubility for scrubbing media; or
 - (3) Periods when the streams contain HAP constituents that approach the limits of adsorptivity for carbon adsorption systems.
- (ii) Hypothetical peak-case. Hypothetical peak-case conditions are simulated test conditions that, at a minimum, contain the highest total average hourly HAP load of emissions that would be predicted to be vented to the control device from the emissions profile described in either paragraph (b)(11)(iii)(B) or (C) of this section.
- (iii) Emissions profile. The owner or operator may choose to perform tests only during those periods of the peak-case episode(s) that the owner or operator selects to control as part of achieving the required emission reduction. Except as specified in paragraph (b)(11)(iii)(D) of this section, the owner or operator shall develop an emission profile for the vent to the control device that describes the characteristics of the vent stream at the inlet to the control device under either absolute or hypothetical peak-case conditions. The emissions profile shall be developed based on the applicable procedures described in paragraphs (b)(11)(iii)(A) through (C) of this section, as required by paragraphs (b)(11)(i) and (ii) of this section.
 - (A) Emissions profile by process. The emissions profile must consider all emission episodes that could contribute to the vent stack for a period of time that is sufficient to include all processes venting to the stack and shall consider production scheduling. The profile shall describe the HAP

load to the device that equals the highest sum of emissions from the episodes that can vent to the control device during the period of absolute peak-case conditions specified in paragraph (b)(11)(i)(A), (B), or (C) as appropriate. Emissions per episode shall be calculated using the procedures specified in paragraph (c)(2) of this section. When complying with paragraph (b)(11)(i)(B) of this section, emissions per episode shall be divided by the duration of the episode if the duration of the episode is longer than 1 hour.

- (B) Emission profile by equipment. The emission profile must consist of emissions that meet or exceed the highest hourly HAP load that would be expected under actual processing conditions. The profile shall describe equipment configurations used to generate the emission events, volatility of materials processed in the equipment, and the rationale used to identify and characterize the emission events. The emissions may be based on using a compound more volatile than compounds actually used in the process(es), and the emissions may be generated from all equipment in the process(es) or only selected equipment.
- (C) Emission profile by capture and control device limitation. The emission profile shall consider the capture and control system limitations and the highest hourly emissions that can be routed to the control device, based on maximum flow rate and concentrations possible because of limitations on conveyance and control equipment (e.g., fans, LEL alarms and safety bypasses).
- (D) Exemptions. The owner or operator is not required to develop an emission profile under the circumstances described in paragraph (b)(11)(iii)(D)(1) or (2) of this section.
 - (1) If all process vents for a process are controlled using a control device or series of control devices that reduce HAP emissions by 98 percent or more, no other emission streams are vented to the control device when it is used to control emissions from the subject process, and the performance test is conducted over the entire batch cycle.
 - (2) If a control device is used to comply with the outlet concentration limit for process vent emission streams from a single process (but not necessarily all of the process vents from that process), no other emission streams are vented to the control device while it is used to control emissions from the subject process, and the performance test is conducted over the entire batch cycle.
- (iv)Test duration. Three runs, at a minimum of 1 hour each, are required for performance testing. When complying with a percent reduction standard, each test run may be a maximum of either 24 hours or the duration of the longest batch controlled by the control device, whichever is shorter, and each run must include the same absolute or hypothetical peak-case conditions, as defined in paragraph (b)(11)(i) or (ii) of this section. When complying with an outlet concentration limit, each run must include the same absolute or

hypothetical peak-case conditions, as defined in paragraph (b)(11)(i) or (ii) of this section, and the duration of each run may not exceed the duration of the applicable peak-case condition.

- (c) Initial compliance with process vent provisions. The owner or operator of an affected source shall demonstrate compliance with the process vent standards in §63.1362(b) using the procedures described in paragraphs (c)(1) through (3) of this section.
 - (1) Compliance with the process vent standards in §63.1362(b) shall be demonstrated in accordance with the provisions specified in paragraphs (c)(1)(i) through (viii) of this section.
 - (i) Initial compliance with the emission limit cutoffs in §63.1362(b)(2)(i) and (b)(4)(i) is demonstrated when the uncontrolled organic HAP emissions from the sum of all process vents within a process are less than or equal to 0.15 Mg/yr. Uncontrolled HAP emissions shall be determined using the procedures described in paragraph (c)(2) of this section.
 - (ii) Initial compliance with the emission limit cutoffs in §63.1362(b)(3)(i) and (b)(5)(i) is demonstrated when the uncontrolled HCl and Cl2 emissions from the sum of all process vents within a process are less than or equal to 6.8 Mg/yr. Initial compliance with the emission limit cutoffs in §63.1362(b)(5)(ii) and (iii) is demonstrated when the uncontrolled HCl and Cl2 emissions are greater than or equal to 6.8 Mg/yr or greater than or equal to 191 Mg/yr, respectively. Uncontrolled emissions shall be determined using the procedures described in paragraph (c)(2) of this section.
 - (iii)Initial compliance with the organic HAP percent reduction requirements specified in 63.1362(b)(2)(ii), (iii), and (b)(4)(ii) is demonstrated by determining controlled HAP emissions using the procedures described in paragraph (c)(3) of this section, determining uncontrolled HAP emissions using the procedures described in paragraph (c)(2) of this section, and calculating the applicable percent reduction. As an alternative, if the conditions specified in paragraph (b)(11)(iii)(D)(1) of this section are met, initial compliance may be demonstrated by showing the control device reduces emissions by 98 percent by weight or greater using the procedures specified in paragraph (c)(3) of this section.
 - (iv)Initial compliance with the HCl and Cl2 percent reduction requirements specified in §63.1362(b)(3)(ii), (b)(5)(ii), and (b)(5)(iii) is demonstrated by determining controlled emissions of HCl and Cl2 using the procedures described in paragraph (c)(3) of this section, determining uncontrolled emissions of HCl and Cl2 using the procedures described in paragraph (c)(2) of this section, and calculating the applicable percent reduction.
 - (v) Initial compliance with the outlet concentration limits in §63.1362(b)(2)(iv)(A), (b)(3)(ii),(b)(4)(ii)(A),(b)(5)(ii)and (iii) is demonstrated when the outlet TOC or total organic HAP concentration is 20 ppmv or less and the outlet HCl and chlorine concentration is 20 ppmv or less. The owner or operator shall demonstrate compliance by fulfilling the requirements in paragraph (a)(6) of this section. If an owner or operator elects

to develop an emissions profile by process as described in paragraph (b)(11)(iii)(A) of this section, uncontrolled emissions shall be determined using the procedures in paragraph (c)(2) of this section.

- (vi)Initial compliance with the alternative standard in §63.1362(b)(6) is demonstrated by fulfilling the requirements in paragraph (a)(5) of this section.
- (vii)Initial compliance when using a flare is demonstrated by fulfilling the requirements in paragraph (a)(3) of this section.
- (viii) No initial compliance demonstration is required for control devices specified in §63.1362(l).
- (2) Uncontrolled emissions. The owner or operator referred to from paragraphs (c)(1)(i) through (v) of this section shall calculate uncontrolled emissions according to the procedures described in paragraph (c)(2)(i) or (ii) of this section, as appropriate.
 - (i) Emission estimation procedures. The owner or operator shall determine uncontrolled HAP emissions using emission measurements and/or calculations for each batch emission episode according to the engineering evaluation methodology in paragraphs (c)(2)(i)(A) through (H) of this section.
 - (A) Individual HAP partial pressures in multicomponent systems shall be determined in accordance with the methods specified in paragraphs (c)(2)(i)(A)(1) through (3) of this section. Chemical property data may be obtained from standard references.
 - (1) If the components are miscible in one another, use Raoult's law to calculate the partial pressures;
 - (2) If the solution is a dilute aqueous mixture, use Henry's law constants to calculate partial pressures;
 - (3) If Raoult's law or Henry's law are not appropriate or available, use any of the methods specified in paragraphs (c)(2)(i)(A)(3)(i) through (*iii*) of this section.
 - (*i*) Use experimentally obtained activity coefficients;
 - (*ii*) Use models such as the group-contribution models to predict activity coefficients;
 - (*iii*) Assume the components of the system behave independently and use the summation of all vapor pressures from the HAP as the total HAP partial pressure;
 - (B) Charging or filling. Emissions from vapor displacement due to transfer of material to a vessel shall be calculated using Equation 9 of this subpart:

$$E = \frac{(V)}{(R)(T)} \times \sum_{i=1}^{n} (P_i)(Mw_i)$$
 (Eq. 9)

E = mass of HAP emitted

 P_i = partial pressure of the individual HAP

V = volume of gas displaced from the vessel

R = ideal gas law constant

T = temperature of the vessel vapor space; absolute

MW_i= molecular weight of the individual HAP

(C) Purging. Emissions from purging shall be calculated using Equation 10 of this subpart, except that for purge flow rates greater than 100 scfm, the mole fraction of HAP will be assumed to be 25 percent of the saturated value.

$$E = \sum_{i=1}^{n} P_{i}Mw_{i} \times \left(\frac{(V)(t)}{(R)(T)}\right) \frac{P_{t}}{P_{t} - \sum_{j=1}^{m} P_{j}}$$
(Eq. 10)

Where:

E = mass of HAP emitted

V = purge flow rate at the temperature and pressure of the vessel vapor space

R = ideal gas law constant

T = temperature of the vessel vapor space; absolute

 P_i = partial pressure of the individual HAP

 P_j = partial pressure of individual condensable compounds (including HAP)

 P_T = pressure of the vessel vapor space

MW_i= molecular weight of the individual HAP

t = time of purge

n = number of HAP compounds in the emission stream

m = number of condensable compounds (including HAP) in the emission stream.

- (D) Heating. Emissions caused by heating the contents of a vessel to a temperature less than the boiling point shall be calculated using the procedures in either paragraph (c)(2)(i)(D)(1), (2), or (4) of this section, as appropriate. If the contents of a vessel are heated to the boiling point, emissions while boiling are assumed to be zero if the owner or operator is complying with the provisions in paragraph (d)(2)(i)(C)(3) of this section.
 - (1) If the final temperature to which the vessel contents are heated is lower than 50 K below the boiling point of the HAP in the vessel, then emissions shall be calculated using Equations 11 through 14 of this subpart.

(*i*) The mass of HAP emitted per episode shall be calculated using Equation 11 of this subpart:

$$E = \frac{\frac{\sum_{i=1}^{n} (P_i)_{T1}}{Pa_1} + \frac{\sum_{i=1}^{n} (P_i)_{T2}}{Pa_2}}{2} \times \Delta \eta \times MW_{HAP}$$
(Eq. 11)

Where:

E = mass of HAP vapor displaced from the vessel being heated $(P_i)_{Tn} = partial pressure of each HAP in the vessel headspace at initial <math>(n = 1)$ and final (n = 2) temperatures

 Pa_1 = initial noncondensable gas pressure in the vessel, as calculated using Equation 13 of this subpart

 Pa_2 = final noncondensable gas pressure in the vessel, as calculated using Equation 13 of this subpart

 ΔH = number of moles of noncondensable gas displaced, as calculated using Equation 12 of this subpart

 MW_{HAP} = The average molecular weight of HAP present in the vessel, as calculated using Equation 14 of this subpart:

n = number of HAP compounds in the displaced vapor

(*ii*) The moles of noncondensable gas displaced shall be calculated using Equation 12 of this subpart:

$$\Delta \eta = \frac{V}{R} \left[\left(\frac{Pa_1}{T_1} - \frac{Pa_2}{T_2} \right) \right] \qquad (Eq. 12)$$

Where:

 ΔH = number of moles of noncondensable gas displaced

V = volume of free space in the vessel

R = ideal gas law constant

 Pa_1 = initial noncondensable gas pressure in the vessel, as calculated using Equation 13 of this subpart

 Pa_2 = final noncondensable gas pressure in the vessel, as calculated using Equation 13 of this subpart

 T_1 = initial temperature of vessel contents, absolute

 T_2 = final temperature of vessel contents, absolute

(*iii*)The initial and final pressure of the noncondensable gas in the vessel shall be calculated according to Equation 13 of this subpart:

$$Pa_n = Pa_{atm} - \sum_{j=1}^{m} (P_j)_{Tn}$$
 (Eq. 13)

 Pa_n = partial pressure of noncondensable gas in the vessel headspace at initial (n = 1) and final (n = 2) temperatures P_{atm} = atmospheric pressure

 $(P_j)_{Tn}$ = partial pressure of each condensable volatile organic compound (including HAP) in the vessel headspace at the initial temperature (n = 1) and final (n = 2) temperature

(*iv*) The average molecular weight of HAP in the displaced gas shall be calculated using Equation 14 of this subpart:

$$MW_{HAP} = \sum_{i=1}^{n} \frac{[(P_i)_{T1} + (P_i)_{T2}] MW_1}{\sum_{i=1}^{n} [(P_i)_{T1} + (P_i)_{T2}]}$$
(Eq. 14)

Where:

MWHAP= average molecular weight of HAP in the displaced gas

(Pi)Tn= partial pressure of each HAP in the vessel headspace at the initial (T1) and final (T2) temperatures

MWi= molecular weight of each HAP

n = number of HAP compounds in the emission stream

- (2) If the vessel contents are heated to a temperature greater than 50 K below the boiling point, then emissions from the heating of a vessel shall be calculated as the sum of the emissions calculated in accordance with paragraphs (c)(2)(i)(D)(2)(i) and (ii) of this section.
 - (*i*) For the interval from the initial temperature to the temperature 50 K below the boiling point, emissions shall be calculated using Equation 11 of this subpart, where T_2 is the temperature 50 K below the boiling point.
 - (ii) For the interval from the temperature 50 K below the boiling point to the final temperature, emissions shall be calculated as the summation of emissions for each 5 K increment, where the emission for each increment shall be calculated using Equation 11 of this subpart. If the final temperature of the heatup is lower than 5 K below the boiling point, the final temperature for the last increment shall be the final temperature of the heatup, even if the last increment is less than 5 K. If the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point, the final temperature of the heatup is higher than 5 K below the boiling point.

temperature for the last increment shall be the temperature 5 K below the boiling point, even if the last increment is less than 5 K.

- (3) While boiling, the vessel must be operated with a properly operated process condenser. An initial demonstration that a process condenser is properly operated is required for vessels that operate process condensers without secondary condensers that are air pollution control devices. The owner or operator must either measure the condenser exhaust gas temperature and show it is less than the boiling point of the substance(s) in the vessel, or perform a material balance around the vessel and condenser to show that at least 99 percent of the material vaporized while boiling is condensed. Uncontrolled emissions are assumed to be zero under these conditions. The initial demonstration shall be conducted for all appropriate operating scenarios and documented in the Notification of Compliance Status report as specified in §63.1368(f).
- (4)(i) As an alternative to the procedures described in paragraphs (c)(2)(i)(D)(1) and (2) of this section, emissions caused by heating a vessel to any temperature less than the boiling point may be calculated using Equation 15 of this subpart.

$$E = MW_{HAP} \times \left[N_{avg} \times \ln \left[\frac{P_{T} - \sum_{i=1}^{m} (P_{i,1})}{P_{T} - \sum_{i=1}^{m} (P_{i,2})} \right] - (n_{HAP,2} - n_{HAP,1}) \right]$$
(Eq. 15)

Where:

E = mass of HAP vapor displaced from the vessel being heated N_{avg} = average gas space molar volume during the heating process, as calculated using Equation 16 of this subpart P_T = total pressure in the vessel

 $P_{i,1}$ = partial pressure of the individual HAP compounds at T_{1}

 $P_{i,2}$ = partial pressure of the individual HAP compounds at T_2

 MW_{HAP} = average molecular weight of the HAP compounds, as calculated using Equation 14 of this subpart

 $n_{HAP,1}$ = number of moles of total HAP in the vessel headspace at T_1

 $n_{HAP,2}$ = number of moles of total HAP in the vessel headspace at T_2

m = number of HAP compounds in the emission stream.

(*ii*) The average gas space molar volume during the heating process is calculated using Equation 16 of this subpart.

$$N_{avg} = \frac{VP_T}{2R} \left(\frac{1}{T_1} + \frac{1}{T_2} \right)$$
 (Eq. 16)

Navg= average gas space molar volume during the heating process

V = volume of free space in vessel

PT= total pressure in the vessel

R = ideal gas law constant

T1= initial temperature of the vessel contents, absolute

T2= final temperature of the vessel contents, absolute

(*iii*)The difference in the number of moles of total HAP in the vessel headspace between the initial and final temperatures is calculated using Equation 17 of this subpart.

$$(n_{\text{HAP2}} - n_{\text{HAP2}}) = \frac{V}{(R)(T_2)} \sum_{i=1}^{n} P_{i,2} - \frac{V}{(R)(T_1)} \sum_{i=1}^{n} P_{i,1}$$
(Eq. 17)

Where:

nHAP,2= number of moles of total HAP in the vessel headspace at T2

nHAP,1= number of moles of total HAP in the vessel headspace at T1

V = volume of free space in vessel

R = ideal gas law constant

T1= initial temperature of the vessel contents, absolute

T2= final temperature of the vessel contents, absolute

Pi,1= partial pressure of the individual HAP compounds at T1

Pi,2= partial pressure of the individual HAP compounds at T2

n = number of HAP compounds in the emission stream.

- (E) Depressurization. Emissions from depressurization shall be calculated using the procedures in paragraphs (c)(2)(i)(E)(1) through (5) of this section. Alternatively, the owner or operator may elect to calculate emissions from depressurization using the procedures in paragraph (c)(2)(i)(E)(6) of this section.
 - (1) The moles of HAP vapor initially in the vessel are calculated using Equation 18 of this subpart:

$$n_{\text{HAP}} = \frac{V}{R T} \times \sum_{i=1}^{n} \left(P_i \right)$$
 (Eq. 18)

n_{HAP}=moles of HAP vapor in the vessel P_i=partial pressure of each HAP in the vessel vapor space V=free volume in the vessel being depressurized R=ideal gas law constant T=absolute temperature in vessel n=number of HAP compounds in the emission stream

(2) The initial and final moles of noncondensable gas present in the vessel are calculated using Equations 19 and 20 of this subpart:

$$n_1 = \frac{VP_{nc1}}{RT}$$
 (Eq. 19) $n_2 = \frac{VP_{nc2}}{RT}$ (Eq. 20)

Where:

n1=initial number of moles of noncondensable gas in the vessel n2=final number of moles of noncondensable gas in the vessel V=free volume in the vessel being depressurized

Pnc1=initial partial pressure of the noncondensable gas, as calculated using Equation 21 of this subpart

Pnc2=final partial pressure of the noncondensable gas, as calculated using Equation 22 of this subpart

R=ideal gas law constant

T=temperature, absolute

(3) The initial and final partial pressures of the noncondensable gas in the vessel are determined using Equations 21 and 22 of this subpart.

$$P_{nc1} = P_1 - \sum_{j=1}^m (P_j^*)(x_j)$$
 (Eq. 21)

$$P_{nc2} = P_2 - \sum_{j=1}^{m} (P_j^*)(x_j)$$
 (Eq. 22)

Where:

Pnc1= initial partial pressure of the noncondensable gas

Pnc2= final partial pressure of the noncondensable gas

P1= initial vessel pressure

P2= final vessel pressure

 $Pj^*=$ vapor pressure of each condensable compound (including HAP) in the emission stream

xj= mole fraction of each condensable compound (including HAP) in the liquid phase

m = number of condensable compounds (including HAP) in the emission stream.

(4) The moles of HAP emitted during the depressurization are calculated by taking an approximation of the average ratio of moles of HAP to moles of noncondensable and multiplying by the total moles of noncondensables released during the depressurization, using Equation 23 of this subpart:

$$n_{\text{HAP},e} = \frac{\left(\frac{n_{\text{HAP},1}}{n_1} - \frac{n_{\text{HAP},2}}{n_2}\right)}{2} [n_1 - n_2] \qquad (\text{Eq. 23})$$

Where:

nHAP,e= moles of HAP emitted

nHAP,1= moles of HAP vapor in vessel at the initial pressure, as calculated using Equation 18 of this subpart

nHAP,2= moles of HAP vapor in vessel at the final pressure, as calculated using Equation18 of this subpart

n1= initial number of moles of noncondensable gas in the vessel, as calculated using Equation 19 of this subpart

n2= final number of moles of noncondensable gas in the vessel, as calculated using Equation 19 of this subpart.

(5) Use Equation 24 of this subpart to calculate the mass of HAP emitted:

$$E = n_{HAP,e} * MW_{HAP}$$
 (Eq. 24)

Where:

E=mass of HAP emitted

nHAP,e=moles of HAP emitted, as calculated using Equation 23 of this subpart

MWHAP=average molecular weight of the HAP as calculated using Equation 14 of this subpart

(6) As an alternative to the procedures in paragraphs (c)(2)(i)(E)(1) through (5) of this section, emissions from depressurization may be calculated using Equation 25 of this subpart:

$$E = \frac{V}{(R)(T)} \times \ln \left[\frac{P_1 - \sum_{j=1}^{m} (P_j)}{P_2 - \sum_{j=1}^{m} (P_j)} \right] \times \sum_{i=1}^{n} (P_i)(Mw_i)$$
 (Eq. 25)

V=free volume in vessel being depressurized R=ideal gas law constant T=temperature of the vessel, absolute P1=initial pressure in the vessel P2=final pressure in the vessel Pi=partial pressure of the individual HAP compounds Pj=partial pressure of individual condensable VOC compounds (including HAP) MWi=molecular weight of the individual HAP compounds n=number of HAP compounds in the emission stream m=number of condensable VOC compounds (including HAP) in the emission stream

(F) Vacuum systems. Calculate emissions from vacuum systems using Equation 26 of this subpart:

$$E = \frac{(MW_{HAP})(La)(t)}{MW_{nc}} \left[\frac{\sum_{i=1}^{n} P_{i}}{P_{T} - \sum_{j=1}^{m} P_{j}} \right]$$
(Eq. 26)

Where:

E = mass of HAP emitted

 P_T = absolute pressure of receiving vessel or ejector outlet conditions, if there is no receiver

 $P_i \!\!=\! partial \ pressure \ of \ individual \ HAP$ at the receiver temperature or the ejector outlet conditions

 P_j = partial pressure of individual condensable compounds (including HAP) at the receiver temperature or the ejector outlet conditions

La = total air leak rate in the system, mass/time

MW_{nc}= molecular weight of noncondensable gas

t = time of vacuum operation

 MW_{HAP} = average molecular weight of HAP in the emission stream, as calculated using Equation 14 of this subpart, with HAP partial pressures calculated at the temperature of the receiver or ejector outlet, as appropriate

n = number of HAP components in the emission stream

m= number of condensable compounds (including HAP) in the emission stream.

(G) Gas evolution. Emissions from gas evolution shall be calculated using Equation 10 of this subpart with V calculated using Equation 27 of this subpart:

$$V = \frac{(W_g)(R)(T)}{(P_T)(MW_g)}$$
 (Eq. 27)

V=volumetric flow rate of gas evolution W_g=mass flow rate of gas evolution R=ideal gas law constant T=temperature at the exit, absolute P_T =vessel pressure MW_g=molecular weight of the evolved gas

(H) Air drying. Use Equation 28 of this subpart to calculate emissions from air drying:

$$E = B \times \left(\frac{PS_1}{100 - PS_1} - \frac{PS_2}{100 - PS_2} \right)$$
 (Eq. 28)

Where:

E=mass of HAP emitted B=mass of dry solids PS1=HAP in material entering dryer, weight percent PS2=HAP in material exiting dryer, weight percent.

- (ii) Engineering assessments. The owner or operator shall conduct an engineering assessment to determine uncontrolled HAP emissions for each emission episode that is not due to vapor displacement, purging, heating, depressurization, vacuum systems, gas evolution, or air drying. For a given emission episode caused by any of these seven types of activities, the owner or operator also may request approval to determine uncontrolled HAP emissions based on an engineering assessment. Except as specified in paragraph (c)(2)(ii)(A) of this section, all data, assumptions, and procedures used in the engineering assessment shall be documented in the Precompliance plan in accordance with §63.1367(b). An engineering assessment includes, but is not limited to, the information and procedures described in paragraphs (c)(2)(ii)(A) through (D) of this section.
 - (A) Test results, provided the tests are representative of current operating practices at the process unit. For process vents without variable emission stream characteristics, an engineering assessment based on the results of a previous test may be submitted in the Notification of Compliance Status report instead of the Precompliance plan. Results from a previous test of process vents with variable emission stream characteristics will be acceptable in place of values estimated using the procedures specified in paragraph (c)(2)(i) of this section if the test data show a greater than 20 percent discrepancy between the test value and the estimated value,

and the results of the engineering assessment shall be included in the Notification of Compliance Status report. For other process vents with variable emission stream characteristics, engineering assessments based on the results of a previous test must be submitted in the Precompliance plan. For engineering assessments based on new tests, the owner or operator must comply with the test notification requirements in §63.1368(m), and the results of the engineering assessment may be submitted in the Notification of Compliance Status report rather than the Precompliance plan.

- (B) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.
- (C) Maximum flow rate, HAP emission rate, concentration, or other relevant parameter specified or implied within a permit limit applicable to the process vent.
- (D) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:
 - (1) Use of material balances based on process stoichiometry to estimate maximum organic HAP concentrations;
 - (2) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities; and
 - (3) Estimation of HAP concentrations based on saturation conditions.
- (3) Controlled emissions. Except for condensers, the owner or operator shall determine controlled emissions using the procedures in either paragraph (c)(3)(i) or (ii) of this section, as applicable. For condensers, controlled emissions shall be calculated using the emission estimation equations described in paragraph (c)(3)(iii) of this section. The owner or operator is not required to calculate controlled emissions from devices described in paragraph (a)(4) of this section or from flares for which compliance is demonstrated in accordance with paragraph (a)(3) of this section. If the owner or operator is complying with an outlet concentration standard and the control device uses supplemental gases, the outlet concentrations shall be corrected in accordance with the procedures described in paragraph (a)(7) of this section.
 - (i) Small control devices, except condensers. Controlled emissions for each process vent that is controlled using a small control device, except for a condenser, shall be determined by using the design evaluation described in paragraph (c)(3)(i)(A) of this section, or by conducting a performance test in accordance with paragraph (c)(3)(ii) of this section.

- (A) Design evaluation. The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency under absolute or hypothetical peak-case conditions, as determined from the emission profile described in paragraph (b)(11)(iii) of this section. The control efficiency determined from this design evaluation shall be applied to uncontrolled emissions to estimate controlled emissions. The documentation must be conducted in accordance with the provisions in paragraph (a)(1) of this section. The design evaluation shall also include the value(s) and basis for the parameter(s) monitored under §63.1366.
- (B) Whenever a small control device becomes a large control device, the owner or operator must comply with the provisions in paragraph (c)(3)(ii) of this section and submit the test report in the next Periodic report.
- (ii) Large control devices, except condensers. Controlled emissions for each process vent that is controlled using a large control device, except for a condenser, shall be determined by applying the control efficiency of the large control device to the estimated uncontrolled emissions. The control efficiency shall be determined by conducting a performance test on the control device as described in paragraphs (c)(3)(ii)(A) through (C) of this section, or by using the results of a previous performance test as described in paragraph (c)(3)(ii)(D) of this section. If the control device is intended to control only HCl and chlorine, the owner or operator may assume the control efficiency of organic HAP is 0 percent. If the control device is intended to control only organic HAP, the owner or operator may assume the control efficiency for HCl and chlorine is 0 percent.
 - (A) Performance test measurements shall be conducted at both the inlet and outlet of the control device for TOC, total organic HAP, and total HCl and chlorine, as applicable, using the test methods and procedures described in paragraph (b) of this section. Concentrations shall be calculated from the data obtained through emission testing according to the procedures in paragraph (a)(2) of this section.
 - (B) Performance testing shall be conducted under absolute or hypothetical peak-case conditions, as defined in paragraphs (b)(11)(i) and (ii) of this section.
 - (C) The owner or operator may elect to conduct more than one performance test on the control device for the purpose of establishing more than one operating condition at which the control device achieves the required control efficiency.

- (D) The owner or operator is not required to conduct a performance test for any control device for which a previous performance test was conducted, provided the test was conducted using the same procedures specified in paragraphs (b)(1) through (11) of this section over conditions typical of the absolute or hypothetical peak-case, as defined in paragraphs (b)(11)(i) and (ii) of this section. The results of the previous performance test shall be used to demonstrate compliance.
- (iii)Condensers. The owner or operator using a condenser as a control device shall determine controlled emissions for each batch emission episode according to the engineering methodology in paragraphs (c)(3)(iii)(A) through (G) of this section. The owner or operator must establish the maximum outlet gas temperature and calculate the controlled emissions using this temperature in the applicable equation. Individual HAP partial pressures shall be calculated as specified in paragraph (c)(2)(i) of this section.
 - (A) Emissions from vapor displacement due to transfer of material to a vessel shall be calculated using Equation 9 of this subpart with T set equal to the temperature of the receiver and the HAP partial pressures determined at the temperature of the receiver.
 - (B) Emissions from purging shall be calculated using Equation 10 of this subpart with T set equal to the temperature of the receiver and the HAP partial pressures determined at the temperature of the receiver.
 - (C) Emissions from heating shall be calculated using Equation 29 of this subpart. In Equation 29 of this subpart, $\Delta \eta$ is equal to the number of moles of noncondensable displaced from the vessel, as calculated using Equation 12 of this subpart. In Equation 29 of this subpart, the HAP average molecular weight shall be calculated using Equation 14 with the HAP partial pressures determined at the temperature of the receiver.

$$E = \Delta \eta \times \frac{\sum_{i=1}^{n} P_i}{P_T - \sum_{j=1}^{m} P_j} \times MW_{HAP}$$
(Eq. 29)

 $\begin{array}{l} E=mass \ of \ HAP \ emitted \\ \Delta\eta=moles \ of \ noncondensable \ gas \ displaced \\ P_T=pressure \ in \ the \ receiver \\ P_i=partial \ pressure \ of \ the \ individual \ HAP \ at \ the \ receiver \ temperature \\ P_j=partial \ pressure \ of \ the \ individual \ condensable \ VOC \ (including \ HAP) \\ at \ the \ receiver \ temperature \\ n=number \ of \ HAP \ compounds \ in \ the \ emission \ stream \end{array}$

 MW_{HAP} =the average molecular weight of HAP in vapor exiting the receiver, as calculated using Equation 14 of this subpart

m=number of condensable VOC (including HAP) in the emission stream

(D) (1) Emissions from depressurization shall be calculated using Equation 30 of this subpart.

$$E = (V_{nc1} - V_{nc2}) \times \frac{\sum_{i=1}^{n} (P_i)}{P_T - \sum_{j=1}^{m} (P_j)} \times \frac{P_T}{RT} \times MW_{HAP}$$
(Eq. 30)

Where:

E=mass of HAP vapor emitted

 V_{nc1} =initial volume of noncondensable in the vessel, corrected to the final pressure, as calculated using Equation 31 of this subpart

 V_{nc2} =final volume of noncondensable in the vessel, as calculated using Equation 32 of this subpart

 $P_i\mbox{=}partial\ pressure\ of\ each\ individual\ HAP\ at\ the\ receiver\ temperature$

 P_j =partial pressure of each condensable VOC (including HAP) at the receiver temperature

P_T=receiver pressure

T=temperature of the receiver, absolute

R=ideal gas law constant

 MW_{HAP} =the average molecular weight of HAP calculated using Equation 14 of this subpart with partial pressures determined at the receiver temperature

n=number of HAP compounds in the emission stream

m=number of condensable VOC (including HAP) in the emission stream

(2) The initial and final volumes of noncondensable gas present in the vessel, adjusted to the pressure of the receiver, are calculated using Equations 31 and 32 of this subpart.

$$V_{nc1} = \frac{VP_{nc1}}{P_T}$$
 (Eq. 31) $V_{nc2} = \frac{VP_{nc2}}{P_T}$ (Eq. 32)

Where:

Vnc1=initial volume of noncondensable gas in the vessel Vnc2=final volume of noncondensable gas in the vessel V=free volume in the vessel being depressurized Pnc1=initial partial pressure of the noncondensable gas, as calculated using Equation 33 of this subpart Pnc2=final partial pressure of the noncondensable gas, as calculated using Equation 34 of this subpart PT=pressure of the receiver

(3) Initial and final partial pressures of the noncondensable gas in the vessel are determined using Equations 33 and 34 of this subpart.

$$P_{nc1} = P_1 - \sum_{j=1}^{m} P_j$$
 (Eq. 33) $P_{nc2} = P_2 - \sum_{j=1}^{m} P_j$ (Eq. 34)

Where:

Pnc1=initial partial pressure of the noncondensable gas in the vessel

Pnc2=final partial pressure of the noncondensable gas in the vessel P1=initial vessel pressure

P2=final vessel pressure

Pj=partial pressure of each condensable VOC (including HAP) in the vessel

m=number of condensable VOC (including HAP) in the emission stream

- (E) Emissions from vacuum systems shall be calculated using Equation 26 of this subpart.
- (F) Emissions from gas evolution shall be calculated using Equation 8 with V calculated using Equation 27 of this subpart, T set equal to the receiver temperature, and the HAP partial pressures determined at the receiver temperature. The term for time, t, in Equation 10 of this subpart is not needed for the purposes of this calculation.
- (G) Emissions from air drying shall be calculated using Equation 9 of this subpart with V equal to the air flow rate and Pidetermined at the receiver temperature.
- (d) Initial compliance with storage vessel provisions. The owner or operator of an existing or new affected source shall demonstrate initial compliance with the storage vessel standards in §63.1362(c)(2) through (4) by fulfilling the requirements in either paragraph (d)(1), (2), (3), (4), (5), or (6) of this section, as applicable. The owner or operator shall demonstrate initial compliance with the planned routine maintenance provision in §63.1362(c)(5) by fulfilling the requirements in paragraph (d)(7) of this section.
 - (1) Percent reduction requirement for control devices. If the owner or operator equips a Group 1 storage vessel with a closed vent system and control device, the owner or operator shall demonstrate initial compliance with the percent reduction requirement of §63.1362(c)(2)(iv)(A) or (c)(3) either by calculating

the efficiency of the control device using performance test data as specified in paragraph (d)(1)(i) of this section, or by preparing a design evaluation as specified in paragraph (d)(1)(i) of this section.

- (i) Performance test option. If the owner or operator elects to demonstrate initial compliance based on performance test data, the efficiency of the control device shall be calculated as specified in paragraphs (d)(1)(i)(A) through (D) of this section.
 - (A) At the reasonably expected maximum filling rate, Equations 35 and 36 of this subpart shall be used to calculate the mass rate of total organic HAP or TOC at the inlet and outlet of the control device.

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i \qquad (Eq. 35)$$

$$E_{o} = K_{2} \left(\sum_{j=1}^{n} C_{oj} M_{oj} \right) Q_{o} \qquad (Eq. 36)$$

Where:

 C_{ij} , C_{oj} = concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, ppmv

 E_i , E_o = mass rate of total organic HAP or TOC at the inlet and outlet of the control device, respectively, dry basis, kg/hr

 M_{ij} , M_{oj} = molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, g/gmole

 Q_i , Q_o = flow rate of gas stream at the inlet and outlet of the control device, respectively, dscmm

 K_2 = constant, 2.494 × 10⁻⁶(parts per million)⁻¹(gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature is 20 °C.

(B) The percent reduction in total organic HAP or TOC shall be calculated using Equation 37 of this subpart:

$$R = \frac{E_i - E_o}{E_i} -100 \qquad (Eq. 37)$$

Where:

R = control efficiency of control device, percent

Ei= mass rate of total organic HAP or TOC at the inlet to the control device as calculated under paragraph (d)(l)(i)(A) of this section, kilograms organic HAP per hour

 E_o = mass rate of total organic HAP or TOC at the outlet of the control device, as calculated under paragraph (d)(1)(i)(A) of this section, kilograms organic HAP per hour.

- (C) A performance test is not required to be conducted if the control device used to comply with §63.1362(c) (storage tank provisions) is also used to comply with §63.1362(b) (process vent provisions), provided compliance with §63.1362(b) is demonstrated in accordance with paragraph (c) of this section and the demonstrated percent reduction is equal to or greater than 95 percent.
- (D) A performance test is not required for any control device for which a previous test was conducted, provided the test was conducted using the same procedures specified in paragraph (b) of this section.
- (ii) Design evaluation option. If the owner or operator elects to demonstrate initial compliance by conducting a design evaluation, the owner or operator shall prepare documentation in accordance with the design evaluation provisions in paragraph (a)(1) of this section, as applicable. The design evaluation shall demonstrate that the control device being used achieves the required control efficiency when the storage vessel is filled at the reasonably expected maximum filling rate.
- (2) Outlet concentration requirement for control devices. If the owner or operator equips a Group 1 storage vessel with a closed vent system and control device, the owner or operator shall demonstrate initial compliance with the outlet concentration requirements of §63.1362(c)(2)(iv)(B) or (c)(3) by fulfilling the requirements of paragraph (a)(6) of this section.
- (3) Floating roof. If the owner or operator equips a Group 1 storage vessel with a floating roof to comply with the provisions in §63.1362(c)(2) or (c)(3), the owner or operator shall demonstrate initial compliance by complying with the procedures described in paragraphs (d)(3)(i) and (ii) of this section.
 - (i) Comply with §63.119(b), (c), or (d) of subpart G of this part, as applicable, with the differences specified in §63.1362(d)(2)(i) through (iii).
 - (ii) Comply with the procedures described in §63.120(a), (b), or (c), as applicable, with the differences specified in paragraphs (d)(3)(ii)(A) through (C) of this section.
 - (A) When the term "storage vessel" is used in §63.120, the definition of the term "storage vessel" in §63.1361 shall apply for the purposes of this subpart.

- (B) When the phrase "the compliance date specified in §63.100 of subpart F of this part" is referred to in §63.120, the phrase "the compliance date specified in §63.1364" shall apply for the purposes of this subpart.
- (C) When the phrase "the maximum true vapor pressure of the total organic HAP in the stored liquid falls below the values defining Group 1 storage vessels specified in Table 5 or Table 6 of this subpart" is referred to in §63.120(b)(1)(iv), the phrase "the maximum true vapor pressure of the total organic HAP in the stored liquid falls below the values defining Group 1 storage vessels specified in §63.1361" shall apply for the purposes of this subpart.
- (4) Flares. If the owner or operator controls the emissions from a Group 1 storage vessel with a flare, initial compliance is demonstrated by fulfilling the requirements in paragraph (a)(3) of this section.
- (5) Exemptions from initial compliance. No initial compliance demonstration is required for control devices specified in paragraph (a)(4) of this section.
- (6) Initial compliance with alternative standard. If the owner or operator equips a Group 1 storage vessel with a closed-vent system and control device, the owner or operator shall demonstrate initial compliance with the alternative standard in §63.1362(c)(4) by fulfilling the requirements of paragraph (a)(5) of this section.
- (7) Planned routine maintenance. The owner or operator shall demonstrate initial compliance with the planned routine maintenance provisions of §63.1362(c)(5) by including the anticipated periods of planned routine maintenance for the first reporting period in the Notification of Compliance Status report as specified in §63.1368(f).

[45CSR34, 40CFR§63.1365 (Subpart MMM)]

4.4. Recordkeeping Requirements

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

- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, 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.
- 4.4.4. For the purpose of demonstrating compliance with condition 4.1.2, the permittee shall maintain daily, monthly, and annual Larvin production records on a 12-month rolling basis.
- 4.4.5. For the purpose of demonstrating compliance with condition 4.2.1, the permittee shall maintain the following records for the fugitive air scrubber [A330]:
 - a. The date, time, and duration if the low flow alarm monitoring device signals a flow less than 150 gpm; and
 - b. Caustic solution concentration.
- 4.4.6. For the purpose of demonstrating compliance with conditions 4.2.2 and 4.2.3, the permittee shall maintain the following records for the back-up process flare [B330(7c)] and for the emergency flare [B330(7c(a))]:
 - a. periods of operation during which the flare pilot flame is absent during the operation of the Larvin Process;
 - b. natural gas usage for the back-up process flare; and

- c. vent gas hours that the back-up flare is used as a control device.
- 4.4.7. For the purpose of demonstrating compliance with condition 4.2.4, the permittee shall maintain the following records for the baghouses (3c[A331] and 5c[A332]):
 - a. material balances around the baghouses; and
 - b. monthly press drop records across the baghouses.
- 4.4.8. For the purpose of demonstrating compliance with condition 4.2.5, the permittee shall maintain the following records for the PTO/Scrubber [B332/C332]:
 - a. Records shall be kept of all periods of operation during with the PTO pilot flame is absent during the operation of the Larvin Process;
 - b. Records shall be kept of natural gas usage for the PTO [B332];
 - c. Records shall be maintained of the exit gas temperature; and
 - d. Records shall be maintained of the liquor flow rate.
- 4.4.9. For the purpose of demonstrating compliance with condition 4.2.6, the permittee shall maintain continuous monitoring records of the process vent gas flow rate prior to being routed to the control device.
- 4.4.10. For the purpose of demonstrating compliance with the throughput condition 4.2.7, the permittee shall maintain monthly and annual throughput records for tanks T-37 and T-38.
- 4.4.11. The permittee shall maintain records of all monitoring data required by Section 4.1.12 of this permit documenting the date and time of each visible emission check, the emission point or equipment / source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
- 4.4.12. To demonstrate compliance with the LDAR requirements in condition 4.1.15, the permittee shall maintain LDAR monitoring records in accordance with 40CFR§63.160, Subpart H.
- 4.4.13. Equipment Leaks: [Fugitive Emissions]
 - (g) Recordkeeping requirements.

- (1) An owner or operator of more than one group of processes subject to the provisions of this section may comply with the recordkeeping requirements for the groups of processes in one recordkeeping system if the system identifies with each record the program being implemented (e.g., quarterly monitoring) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.
- (2) General recordkeeping. Except as provided in 40CFR§63.1363(g)(5), the following information pertaining to all equipment subject to the requirements in this section shall be recorded:
 - (i) (A) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this section. Connectors, except those subject to 40CFR§63.1363(f), need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this section are identified as a group, and the number of subject connectors is indicated. The list for each type of equipment shall be completed no later than the completion of the initial survey required for that component. The list of identification numbers shall be updated, if needed, to incorporate equipment changes within 15 calendar days of the completion of each monitoring survey for the type of equipment component monitored.
 - (B) A schedule for monitoring connectors subject to the provisions of 40CFR§63.174(a) of subpart H of this part and valves subject to the provisions of 40CFR§63.1363(e)(4).
 - (C) Physical tagging of the equipment is not required to indicate that it is in organic HAP service. Equipment subject to the provisions of this section may be identified on a plant site plan, in log entries, or by other appropriate methods.
 - (ii) (A) A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, subject to the provisions of paragraphs (b)(4)(iv) or (c)(7) of this section or §63.164(h).
 - (B) A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40CFR§63.164(i) of subpart H of this part.

- (iii)(A) A list of identification numbers for pressure relief devices subject to the provisions in paragraph (b)(4)(i) of this section.
 - (B) A list of identification numbers for pressure relief devices equipped with rupture disks, subject to the provisions of paragraph (b)(4)(ii)(B) of this section
- (iv)Identification of instrumentation systems subject to the provisions of this section. Individual components in an instrumentation system need not be identified.
- (v) The following information shall be recorded for each dual mechanical seal system:
 - (A) Design criteria required by 40CFR§63.1363(c)(5)(vi)(A) and 40CFR§63.164(e)(2) of subpart H of this part, and an explanation of the design criteria; and
 - (B) Any changes to these criteria and the reasons for the changes.
- (vi)A list of equipment designated as unsafe-to-monitor or difficult-to-monitor under 40CFR§63.1363(f) and a copy of the plan for monitoring this equipment.
- (vii) A list of connectors removed from and added to the process, as described in 40CFR§63.174(i)(1) of subpart H of this part, and documentation of the integrity of the weld for any removed connectors, as required in 40CFR§63.174(j) of subpart H of this part. This is not required unless the net credits for removed connectors is expected to be used.
- (viii) For batch processes that the owner or operator elects to monitor as provided under 40CFR§63.178© of subpart H of this part, a list of equipment added to batch product processes since the last monitoring period required in 40CFR§63.178©(3)(ii) and (iii) of subpart H of this `part. This list must be completed for each type of equipment within 15 calendar days of the completion of the each monitoring survey for the type of equipment monitored.
- (3) Records of visual inspections. For visual inspections of equipment subject to the provisions of 40CFR§63.1363©(2)(iii) and ©(5)(iv), the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in paragraph (g)(4) of this section for leaking equipment identified in this inspection, except as provided in paragraph (g)(5) of this section. These records shall be retained for 5 years.
- (4) Monitoring records. When each leak is detected as specified in 40CFR§63.1363© and (e) and 40CFR§63.164, 63.169, 63.172, and 63.174 of

subpart H of this part, the owner or operator shall record the information specified in paragraphs (g)(4)(i) through (ix) of this section. All records shall be retained for 5 years, in accordance with the requirements of 40CFR63.10(b)(1) of subpart A of this part.

- (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
- (ii) The date the leak was detected and the date of first attempt to repair the leak.
- (iii)The date of successful repair of the leak.
- (iv)If postrepair monitoring is required, maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A, after it is successfully repaired or determined to be nonrepairable.
- (v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures must be maintained at the plant site. Reasons for delay of repair may be documented by citing the relevant sections of the written procedure
 - (B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked onsite before depletion and the reason for depletion.
- (vi)If repairs were delayed, dates of process shutdowns that occur while the equipment is unrepaired.
- (vii)(A)If the alternative in 40CFR§63.174(c)(1)(ii) of subpart H of this part is not in use for the monitoring period, identification, either by list, location (area or grouping), or tagging of connectors disturbed since the last monitoring period required in 40CFR§63.174(b) of subpart H of this part, as described in 40CFR§63.174(c)(1) of subpart H of this part.
 - (B) The date and results of follow-up monitoring as required in 40CFR§63.174(c) of subpart H of this part.
 If identification of disturbed connectors is made by location, then all connectors within the designated location shall be monitored.
- (viii) The date and results of the monitoring required in 40CFR§63.178(c)(3)(i) of subpart H of this part for equipment added to a batch process since the last monitoring period required in 40CFR§63.178(c)(3)(ii) and (iii) of subpart H of this part. If no leaking equipment is found in this monitoring,

the owner or operator shall record that the inspection was performed. Records of the actual monitoring results are not required.

- (ix)Copies of the periodic reports as specified in 40CFR§63.1363(h)(3), if records are not maintained on a computerized data base capable of generating summary reports from the records.
- (5) Records of pressure tests. The owner or operator who elects to pressure test a process equipment train and supply lines between storage and processing areas to demonstrate compliance with this section is exempt from the requirements of paragraphs (g)(2), (3), (4), and (6) of this section. Instead, the owner or operator shall maintain records of the following information:
 - (i) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in the process equipment train.
 - (ii) Records demonstrating the proportion of the time during the calendar year the equipment is in use in the process that is subject to the provisions of this subpart. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the owner or operator does not adjust monitoring frequency by the time in use, as provided in 40CFR§63.178(c)(3)(iii) of subpart H of this part.
 - (iii)Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of this section is not required. Equipment in a process subject to the provisions of this section may be identified on a plant site plan, in log entries, or by other appropriate methods.
 - (iv)The dates of each pressure test required in 40CFR§63.178(b) of subpart H of this part, the test pressure, and the pressure drop observed during the test.
 - (v) Records of any visible, audible, or olfactory evidence of fluid loss.
 - (vi)When a process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:
 - (A) The date of each pressure test and the date of each leak repair attempt.
 - (B) Repair methods applied in each attempt to repair the leak.
 - (C) The reason for the delay of repair.
 - (D) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

- (E) The date of successful repair.
- (6) Records of compressor and pressure relief device compliance tests. The dates and results of each compliance test required for compressors subject to the provisions in §63.164(i) and the dates and results of the Method 21 of 40 CFR part 60, appendix A, monitoring following a pressure release for each pressure relief device subject to the provisions in paragraphs (b)(4)(i) and (ii) of this section. The results shall include:
 - (i) The background level measured during each compliance test.
 - (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
- (7) Records for closed-vent systems. The owner or operator shall maintain records of the information specified in 40CFR§63.1363(g)(7)(i) through (iii) for closed-vent systems and control devices subject to the provisions of 40CFR§63.1363(b)(3)(ii). The records specified in 40CFR§63.1363(g)(7)(i) shall be retained for the life of the equipment. The records specified in 40CFR§63.1363(g)(7)(ii) and (iii) shall be retained for 5 years.
 - (i) The design specifications and performance demonstrations specified in 40CFR§63.1363(g)(7)(i)(A) through (D).
 - (A) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
 - (B) The dates and descriptions of any changes in the design specifications.
 - (C) The flare design (i.e., steam assisted, air assisted, or nonassisted) and the results of the compliance demonstration required by 40CFR63.11(b) of subpart A of this part.
 - (D) A description of the parameter or parameters monitored, as required in 40CFR§63.1363(b)(3)(ii), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - (ii) Records of operation of closed-vent systems and control devices.
 - (A) Dates and durations when the closed-vent systems and control devices required in 40CFR§63.1363(c) and 40CFR§63.164 through 63.166 of subpart H of this part are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
 - (B) Dates and durations during which the monitoring system or monitoring device is inoperative.

- (C) Dates and durations of startups and shutdowns of control devices required in 40CFR§63.1363(c) and 40CFR§63.164 through 63.166 of subpart H of this part.
- (iii)Records of inspections of closed-vent systems subject to the provisions of 40CFR§63.172 of subpart Hof this part.
 - (A) For each inspection conducted in accordance with the provisions of 40CFR§63.172(f)(1) or (2) of subpart H of this part during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
 - (B) For each inspection conducted in accordance with the provisions of 40CFR§63.172(f)(1) or (f)(2) of subpart H of this part during which leaks were detected, the information specified in 40CFR§63.1363(g)(4) shall be recorded.
- (8) Records for components in heavy liquid service. Information, data, and analysis used to determine that a piece of equipment or process is in heavy liquid service shall be recorded. Such a determination shall include an analysis or demonstration that the process fluids do not meet the criteria of ``in light liquid or gas/vapor service." Examples of information that could document this include, but are not limited to, ''cords of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.
- (9) Records of exempt components. Identification, either by list, location (area or group), or other method of equipment in organic HAP service less than 300 hr/yr subject to the provisions of this section.
- (10) Records of alternative means of compliance determination. Owners and operators choosing to comply with the requirements of 40CFR§63.179 of subpart H of this part shall maintain the following records:
 - (i) Identification of the process(es) and the organic HAP they handle.
 - (ii) A schematic of the process, enclosure, and closed-vent system.
 - (iii)A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.
- (11) Records of pressure releases to the atmosphere from pressure relief devices. For pressure relief devices in organic HAP service subject to paragraph (b)(4)(iii) of this section, keep records of each pressure release to the atmosphere, including the following information:
 - (i) The source, nature, and cause of the pressure release.

- (ii) The date, time, and duration of the pressure release.
- (iii) The quantity of total HAP emitted during the pressure release and the calculations used for determining this quantity.
- (iv) The actions taken to prevent this pressure release.
- (v) The measures adopted to prevent future such pressure releases.

[45CSR34, 40CFR§63.1363(g) (Subpart MMM)]

- 4.4.14.(a) Requirements of subpart A of this part. The owner or operator of an affected source shall comply with the recordkeeping requirements in subpart A of this part as specified in Subpart MMM, Table 1 and in 40CFR§63.1367(a)(1) through (5).
 - (1) Data retention. Each owner or operator of an affected source shall keep copies of all records and reports required by this subpart for at least 5 years, as specified in 40CFR§63.10(b)(1) of subpart A of this part.
 - (3) Records of malfunctions.
 - (i) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, and duration of each failure.
 - (ii) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.
 - (iii)Record actions taken to minimize emissions in accordance with §63.1360(e)(4), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
 - (4) Recordkeeping requirements for sources with continuous monitoring systems. The owner or operator of an affected source who installs a continuous monitoring system to comply with the alternative standards in §63.1362(b)(6) or (c)(4) shall maintain records specified in §63.10(c)(1) through (14) of subpart A of this part.
 - (b) Records of equipment operation. The owner or operator must keep the records specified in 40CFR§63.1367(b)(1), (6), (7), and (10) up-to-date and readily accessible.
 - (1) Each measurement of a control device operating parameter monitored in accordance with 40CFR§63.1366 and each measurement of a treatment process parameter monitored in accordance with the provisions of 40CFR63.1362(d).
- (6) The owner or operator of an affected source that complies with the standards for process vents, storage tanks, and wastewater systems shall maintain up-to-date, readily accessible records of the information specified in 40CFR§63.1367(b)(6)(i) through (vii) to document that HAP emissions or HAP loadings (for wastewater) are below the limits specified in 40CFR§63.1362:
 - (i) Except as specified in 40CFR§63.1367(b)(6)(ix), the initial calculations of uncontrolled and controlled emissions of gaseous organic HAP and HCl per batch for each process.
 - (ii) The wastewater concentrations and flow rates per POD and process.
 - (iii)The number of batches per year for each batch process.
 - (iv)The operating hours per year for continuous processes.
 - (v) The number of batches and the number of operating hours for processes that contain both batch and continuous operations.
 - (vi)The number of tank turnovers per year, if used in an emissions average or for determining applicability of a new PAI process unit.
 - (vii) A description of absolute or hypothetical peak-case operating conditions as determined using the procedures in 40CFR§63.1365(b)(11).
 - (viii) Periods of planned routine maintenance as described in 40CFR§63.1362(c)(5).
 - (ix) As an alternative to the records in 40CFR§63.1367(b)(6)(i), a record of the determination that the conditions in 40CFR63.1365(b)(11)(iii)(D)(1) or (2) are met.
- (7) Daily schedule or log of each operating scenario updated daily or, at a minimum, each time a different operating scenario is put into operation.
- (10) All maintenance performed on the air pollution control equipment.
- (c) Records of equipment leak detection and repair. The owner or operator of an affected source subject to the equipment leak standards in 40CFR§63.1363 shall implement the recordkeeping requirements specified in 40CFR§63.1363(g). All records shall be retained for a period of 5 years, in accordance with the requirements of 40CFR§63.10(b)(1) of subpart A of this part.
- (f) Records of inspections. The owner or operator shall keep records specified in 40CFR§63.1367(f)(1) through (6).
 - (1) Records identifying all parts of the vapor collection system, closed-vent system,

fixed roof, cover, or enclosure that are designated as unsafe to inspect in accordance with 40CFR§63.1366(h)(6), an explanation of why the equipment is unsafe-to-inspect, and the plan for inspecting the equipment.

- (2) Records identifying all parts of the vapor collection system, closed-vent system, fixed roof, cover, or enclosure that are designated as difficult-to-inspect in accordance with 40CFR§63.1366(h)(7), an explanation of why the equipment is difficult-to-inspect, and the plan for inspecting the equipment.
- (3) For each vapor collection system or closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the owner or operator shall keep a record of the information specified in either 40CFR§63.1367(f)(3)(i) or (ii) of this section.
 - (i) Hourly records of whether the flow indicator specified under 40CFR§63.1362(j)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.
 - (ii) Where a seal mechanism is used to comply with 40CFR§63.1362(j)(2), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanisms has been done and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and key type lock has been checked out, and records of any car-seal that has broken.
- (4) For each inspection conducted in accordance with 40CFR§63.1366(h)(2) and
 (3) during which a leak is detected, a record of the information specified in 40CFR§63.1367(f)(4)(i) through (ix).
 - (i) Identification of the leaking equipment.
 - (ii) The instrument identification numbers and operator name or initials, if the leak was detected using the procedures described in 40CFR§63.1366(h)(3); or a record of that the leak was detected by sensory observations.
 - (iii)The date the leak was detected and the date of the first attempt to repair the leak.
 - (iv)Maximum instrument reading measured by the method specified in 40CFR§63.1366(h)(4) after the leak is successfully repaired or determined to be nonrepairable.
 - (v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

- (vi)The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown.
- (vii) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
- (viii) Dates of shutdowns that occur while the equipment is unrepaired.

(ix)The date of successful repair of the leak.

- (5) For each inspection conducted in accordance with 40CFR§63.1366(h)(3) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (6) For each visual inspection conducted in accordance with 40CFR§63.1366(h)(2)(i)(B) or (iii)(B) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (g) Records of primary use. For a PAI process unit that is used to produce a given material for use as a PAI as well as for other purposes, the owner or operator shall keep records of the total production and the production for use as a PAI on a semiannual or more frequent basis if the use as a PAI is not the primary use. [45CSR34, 40CFR§63.1367 (Subpart MMM)]

4.5. **Reporting Requirements**

- 4.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- 4.5.2. Reports of excess emissions. -- Except as provided in condition 4.5.3, the owner or operator of any facility containing sources subject to 45CSR§21-5 shall, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:
 - a. The name and location of the facility;
 - b. The subject sources that caused the excess emissions;
 - c. The time and date of first observation of the excess emissions; and

- d. The cause and expected duration of the excess emissions.
- e. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
- f. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.
 [CO-R21-97-4 (Condition III.3) and 45CSR§21-5.2]
- 4.5.3. Variance. -- If the provisions of this regulation cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions.

[CO-R21-97-4 (Condition III.3) and 45CSR§21-9.3]

- 4.5.4. Equipment Leaks: [fugitive emissions]
 - (h) Reporting Requirements.
 - (1) Each owner or operator of a source subject to this section shall submit the reports listed in 40CFR§63.1363(h)(1)(i) and (ii).
 - (i) A Notification of Compliance Status report described in 40CFR§63.1363(h)(2), and
 - (ii) Periodic reports described in 40CFR§63.1363(h)(3).
 - (2) Notification of compliance status report. Each owner or operator of a source subject to this section shall submit the information specified in paragraphs (h)(2)(i) through (iii) of this section in the Notification of Compliance Status report described in §63.1368(f). For pressure relief devices subject to the requirements of paragraph (b)(4)(iii) of this section, the owner or operator shall submit the information listed in paragraph (h)(2)(iv) of this section in the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring. Section 63.9(j) of subpart A of this part shall not apply to the Notification of Compliance Status report.

- (i) The notification shall provide the information listed in 40CFR§63.1363(h)(2)(i)(A) through (C) for each group of processes subject to the requirements of 40CFR§63.1363(b) through (g).
 - (A) Identification of the group of processes.
 - (B) Approximate number of each equipment type (e.g., valves, pumps) in organic HAP service, excluding equipment in vacuum service.
 - (C) Method of compliance with the standard (for example, ``monthly leak detection and repair" or ``equipped with dual mechanical seals").
- (ii) The notification the information in shall provide listed 40CFR§63.1363(h)(2)(ii)(A) and (B) for each process subject to the 40CFR§63.1363(b)(3)(iv) requirements of of this section and 40CFR§63.178(b) of subpart H of this part.
 - (A) Products or product codes subject to the provisions of this section, and
 - (B) Planned schedule for pressure testing when equipment is configured for production of products subject to the provisions of this section.
- (iii)The notification shall provide the information listed in 40CFR§63.1363(h)(2)(iii)(A) and (B) for each process subject to the requirements in 40CFR§63.179 of subpart H of this part.
 - (A) Process identification.
 - (B) A description of the system used to create a negative pressure in the enclosure and the control device used to comply with the requirements of 40CFR§63.1363(b)(3)(ii).
- (iv)For pressure relief devices in organic HAP service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process parameters to be monitored (if applicable), a description of the alarms or other methods by which operators will be notified of a pressure release, and a description of how the owner or operator will determine the information to be recorded under paragraphs (g)(11)(ii) and (iii) of this section (i.e., the duration of the pressure release and the methodology and calculations for determining of the quantity of total HAP emitted during the pressure release).
- (3) Periodic reports. The owner or operator of a source subject to this section shall submit Periodic reports.
 - (i) A report containing the information in paragraphs (h)(3)(ii) through (v) of this section shall be submitted semiannually. The first Periodic report shall be submitted no later than 240 days after the date the Notification of Compliance Status report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status report is due.

Each subsequent Periodic report shall cover the 6-month period following the preceding period.

- (ii) For equipment complying with the provisions of 40CFR§63.1363(b) through (g), the Periodic report shall contain the summary information listed in 40CFR§63.1363(h)(3)(ii)(A) through (L) for each monitoring period during the 6-month period.
 - (A) The number of valves for which leaks were detected as described in 40CFR§63.1363(e)(2), the percent leakers, and the total number of valves monitored;
 - (B) The number of valves for which leaks were not repaired as required in 40CFR§63.1363(e)(7), identifying the number of those that are determined nonrepairable;
 - (C) The number of pumps and agitators for which leaks were detected as described in 40CFR§63.1363(c)(2), the percent leakers, and the total number of pumps and agitators monitored;
 - (D) The number of pumps and agitators for which leaks were not repaired as required in 40CFR§63.1363(c)(3);
 - (E) The number of compressors for which leaks were detected as described in 40CFR§63.164(f) of subpart H of this part;
 - (F) The number of compressors for which leaks were not repaired as required in 40CFR§63.164(g) of subpart H of this part;
 - (G) The number of connectors for which leaks were detected as described in 40CFR§63.174(a) of subpart H of this part, the percent of connectors leaking, and the total number of connectors monitored;
 - (H) The number of connectors for which leaks were not repaired as required in 40CFR§63.174(d) of subpart H of this part, identifying the number of those that are determined nonrepairable;
 - (I) The facts that explain any delay of repairs and, where appropriate, why a process shutdown was technically infeasible.
 - (J) The results of all monitoring to show compliance with §§63.164(i) and 63.172(f) conducted within the semiannual reporting period.
 - (K) If applicable, the initiation of a monthly monitoring program under either 40CFR§63.1363(c)(4)(ii) or 40CFR§63.1363(e)(4)(i)(A).
 - (L) If applicable, notification of a change in connector monitoring alternatives as described in 40CFR§63.174(c)(1) of subpart H of this part.
- (iii)For owners or operators electing to meet the requirements of 40CFR§63.178(b) of subpart H of this part, the Periodic report shall include the information listed in 40CFR§63.1363(h)(3)(iii) (A) through (E) for each process.
 - (A) Product process equipment train identification;
 - (B) The number of pressure tests conducted;

- (C) The number of pressure tests where the equipment train failed either the retest or two consecutive pressure tests;
- (D) The facts that explain any delay of repairs; and
- (E) The results of all monitoring to determine compliance with 40CFR§63.172(f) of subpart H of this part.
- (iv)Any change in the information submitted under 40CFR§63.1363(h)(2) shall be provided in the next Periodic report.
- (v) For pressure relief devices in organic HAP service, Periodic Reports must include the information specified in paragraphs (h)(3)(v)(A) through (C) of this section.
 - (A) For pressure relief devices in organic HAP service subject to paragraph
 (b)(4) of this section, report confirmation that all monitoring to show compliance was conducted within the reporting period.
 - (B) For pressure relief devices in organic HAP gas or vapor service subject to paragraph (b)(4)(ii) of this section, report any instrument reading of 500 ppm above background or greater, more than 5 calendar days after the pressure release.
 - (C) For pressure relief devices in organic HAP service subject to paragraph (b)(4)(iii) of this section, report each pressure release to the atmosphere, including the following information:
 - (1) The source, nature, and cause of the pressure release.
 - (2) The date, time, and duration of the pressure release.
 - (3) The quantity of total HAP emitted during the pressure release and the method used for determining this quantity.
 - (4) The actions taken to prevent this pressure release.
 - (5) The measures adopted to prevent future such pressure releases.

[45CSR34, 40CFR§63.1363(h) (Subpart MMM)]

- 4.5.5.(a) The owner or operator of an affected source shall comply with the reporting requirements of 40CFR§63.1368(b) through (l). The owner or operator shall also comply with applicable paragraphs of 40CFR§63.9 and 63.10 of subpart A of this part, as specified in Subpart MMM, Table 1.
 - (e) Precompliance plan. The Precompliance plan shall be submitted at least 3 months prior to the compliance date of the standard. For new sources, the Precompliance plan shall be submitted to the Administrator with the application for approval of construction or reconstruction. The Administrator shall have 90 days to approve or disapprove the Precompliance plan. The Precompliance plan shall be considered approved if the Administrator either approves it in writing, or fails to disapprove it in writing within the 90-day time period. The 90-day period shall begin when the Administrator receives the Precompliance plan. If the Precompliance plan is disapproved, the owner

or operator must still be in compliance with the standard by the compliance date. To change any of the information submitted in the Precompliance plan or to submit a Precompliance plan for the first time after the compliance date, the owner or operator shall notify the Administrator at least 90 days before the planned change is to be implemented; the change shall be considered approved if the Administrator either approves the change in writing, or fails to disapprove the change in writing within 90 days of receipt of the change. The Precompliance plan shall include the information specified in paragraphs (e)(1) through (5) of this section.

- (1) Requests for approval to use alternative monitoring parameters or requests to set monitoring parameters according to §63.1366(b)(4).
- (2) Descriptions of the daily or per batch demonstrations to verify that control devices subject to §63.1366(b)(1)(i) are operating as designed.
- (3) Data and rationale used to support the parametric monitoring level(s) that are set according to §63.1366(b)(3)(ii)(B).
- (4) For owners and operators complying with the requirements of §63.1362(g), the pollution prevention demonstration summary required in §63.1365(g)(1).
- (5) Data and rationale used to support an engineering assessment to calculate uncontrolled emissions from process vents as required in §63.1365(c)(2)(ii).
- (6) For fabric filters that are monitored with bag leak detectors, an operation and maintenance plan that describes proper operation and maintenance procedures, and a corrective action plan that describes corrective actions to be taken, and the timing of those actions, when the particulate matter concentration exceeds the setpoint and activates the alarm.
- (f) Notification of compliance status report. The Notification of Compliance Status report required under §63.9(h) shall be submitted no later than 150 calendar days after the compliance date and shall include the information specified in paragraphs (f)(1) through (7) of this section.
 - (1) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP emissions from the affected source.
 - (2) The results of emissions profiles, performance tests, engineering analyses, design evaluations, or calculations used to demonstrate compliance. For performance tests, results should include descriptions of sampling and analysis procedures and quality assurance procedures.
 - (3) Descriptions of monitoring devices, monitoring frequencies, and the values of monitored parameters established during the initial compliance determinations, including data and calculations to support the levels established.
 - (4) Operating scenarios.

- (5) Descriptions of absolute or hypothetical peak-case operating and/or testing conditions for control devices.
- (6) Identification of emission points subject to overlapping requirements described in §63.1360(i) and the authority under which the owner or operator will comply, and identification of emission sources discharging to devices described by §63.1362(l).
- (7) Anticipated periods of planned routine maintenance during which the owner or operator would not be in compliance with the provisions in §63.1362(c)(1) through (4).
- (8) Percentage of total production from a PAI process unit that is anticipated to be produced for use as a PAI in the 3 years after either June 23, 1999 or startup, whichever is later.
- (9) Records of the initial process units used to create each process unit group, if applicable.
- (g) Periodic reports. The owner or operator shall prepare Periodic reports in accordance with 40CFR§63.1368(g)(1) and (2) and submit them to the Administrator.
 - (1) Submittal schedule. Except as provided in 40CFR§63.1368(g)(1)(i) and (ii), the owner or operator shall submit Periodic reports semiannually. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status report is due. Each subsequent Periodic report shall cover the 6month period following the preceding period and shall be submitted no later than 60 days after the end of the applicable period.
 - (i) The Administrator may determine on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the affected source.
 - (ii) Quarterly reports shall be submitted when the monitoring data are used comply with alternative standards to the in 40CFR§63.1362(b)(6) or (c)(4) and the source experiences excess emissions. Once an affected source reports excess emissions, the affected source shall follow a quarterly reporting format until a request to reduce reporting frequency is approved. If an owner or operator submits a request to reduce the frequency of reporting, the provisions in 40CFR§63.10(e)(3) (ii) and (iii) of subpart A of this part shall apply, except that the term ``excess emissions and continuous monitoring system performance report and/or summary report" shall mean ``Periodic report" for the purposes of this section.
 - (2) Content of periodic report. The owner or operator shall include the information in 40CFR§63.1368(g)(2)(i) through (xii), as applicable.

- (i) Each Periodic report must include the information in 40CFR§63.10(e)(3)(vi)(A) through (M) of subpart A of this part, as applicable.
- (ii) If the total duration of excess emissions, parameter exceedances, or excursions for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total continuous monitoring system downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the Periodic report must include the information in 40CFR§63.1368(g)(2)(ii)(A) through (D).
 - (A) Monitoring data, including 15-minute monitoring values as well as daily average values of monitored parameters, for all operating days when the average values were outside the ranges established in the Notification of Compliance Status report or operating permit.
 - (B) Duration of excursions, as defined in 40CFR§63.1366(b)(7).
 - (C) Operating logs and operating scenarios for all operating days when the values are outside the levels established in the Notification of Compliance Status report or operating permit.
- (iii)For each vapor collection system or closed vent system with a bypass line subject to 40CFR§63.1362(j)(1), records required under 40CFR§63.1366(f) of all periods when the vent stream is diverted from the control device through a bypass line. For each vapor collection system or closed vent system with a bypass line subject to 40CFR§63.1362(j)(2), records required under 40CFR§63.1366(f) of all periods in which the seal mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out.
- (iv)The information in 40CFR§63.1368(g)(2)(iv)(A) through (D) shall be stated in the Periodic report, when applicable.
 - (A) No excess emissions.
 - (B) No exceedances of a parameter.
 - (C) No excursions.
 - (D) No continuous monitoring system has been inoperative, out of control, repaired, or adjusted.
- (v) For each storage vessel subject to control requirements:
 - (A) Actual periods of planned routine maintenance during the reporting period in which the control device does not meet the specifications of 40CFR§63.1362(c)(5); and

- (B) Anticipated periods of planned routine maintenance for the next reporting period.
- (vi)For each PAI process unit that does not meet the definition of primary use, the percentage of the production in the reporting period
- (viii) Updates to the corrective action plan.
- (ix)Records of process units added to each process unit group, if applicable.
- (x) Records of redetermination of the primary product for a process unit group.
- (xi)For each inspection conducted in accordance with 40CFR§63.1366(h)(2) or (3) during which a leak is detected, the records specify in 40CFR§63.1367(h)(4) must be included in the next Periodic report.
- (xii) If the owner or operator elects to comply with the provisions of 40CFR§63.1362(c) by installing a floating roof, the owner or operator shall submit the information specified in 40CFR§63.122(d) through (f) as applicable. References to 40CFR§63.152 in 40CFR§63.122 shall not apply for the purposes of this subpart.
- (h) Notification of process change.
 - (1) Except as specified in 40CFR§63.1368(h)(2), whenever a process change is made, or any of the information submitted in the Notification of Compliance Status report changes, the owner or operator shall submit the information specified in 40CFR§63.1368(h)(1)(i) through (iv) with the next Periodic report required under 40CFR§63.1368(g). For the purposes of this section, a process change means the startup of a new process, as defined in 40CFR§63.1361.
 - (i) A brief description of the process change;
 - (ii) A description of any modifications to standard procedures or quality assurance procedures;
 - (iii)Revisions to any of the information reported in the original Notification of Compliance Status report under 40CFR§63.1368(f); and
 - (iv)Information required by the Notification of Compliance Status report under 40CFR§63.1368(f) for changes involving the addition of processes or equipment.

- (2) The owner or operator must submit a report 60 days before the scheduled implementation date of either of the following:
 - (i) Any change in the activity covered by the Precompliance report.
 - (ii) A change in the status of a control device from small to large.
- (i) Reports of malfunctions. If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time, and duration of each failure. For each failure the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.
- (j) Reports of equipment leaks. The owner or operator of an affected source subject to the standards in 40CFR§63.1363, shall implement the reporting requirements specified in 40CFR§63.1363(h). Copies of all reports shall be retained as records for a period of 5 years, in accordance with the requirements of 40CFR§63.10(b)(1) of subpart A of this part.
- (1) Reports of heat exchange systems. The owner or operator of an affected source subject to the requirements for heat exchange systems in 40CFR§63.1362(f) shall submit information about any delay of repairs as specified in 40CFR§63.104(f)(2) of subpart F of this part, except that when the phrase ``periodic reports required by 40CFR§63.152(c) of subpart G of this part" is referred to in 40CFR§63.104(f)(2) of subpart F of this part, the periodic reports required in 40CFR§63.1368(g) shall apply for the purposes of this subpart.
- (m) Notification of performance test and test Plan. The owner or operator of an affected source shall notify the Administrator of the planned date of a performance test at least 60 days before the test in accordance with §63.7(b) of subpart A of this part. The owner or operator also must submit the test Plan required by §63.7(c) of subpart A of this part and the emission profile required by §63.1365(b)(11)(iii) with the notification of the performance test.
- (p) Electronic reporting. Within 60 days after the date of completing each performance test (as defined in §63.2), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart according to the methods specified in paragraphs (p)(1) or (2) of this section.
 - (1) For data collected using test methods supported by the EPA-provided

software, the owner or operator shall submit the results of the performance test to the EPA by direct computer-to-computer electronic transfer via EPA-provided software, unless otherwise approved by the Administrator. Owners or operators, who claim that some of the information being submitted for performance tests is confidential business information (CBI), must submit a complete file using EPA-provided software that includes information claimed to be CBI on a compact disk, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA by direct computer-to-computer electronic transfer via EPA-provided software.

(2) For any performance test conducted using test methods that are not compatible with the EPA-provided software, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in §60.4.

[45CSR34, 40CFR§63.1368 (Subpart MMM)]

Attachment F

Compliance Schedule

Attachment F Schedule of Compliance

None of the emissions units in the Larvin Unit are currently out of compliance. Therefore, this section is not applicable.

Attachment G

Air Pollution Control Device Forms

ATTACHMENT G - Air Pollution Control Device Form			
Control device ID number: A330	List all emission units associated with this control device. Fugitives		
Manufacturer:	Model number:	Installation date:	
Air Scrubber	NA	1983	
Type of Air Pollution Control Device:			
Baghouse/Fabric Filter	Venturi Scrubber	Multiclone	
Carbon Bed Adsorber X	Packed Tower Scrubber	Single Cyclone	
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank	
Catalytic Incinerator	Condenser	Settling Chamber	
Thermal Incinerator	Flare	Other (describe)	
Wet Plate Electrostatic Precipitator]	Dry Plate Electrostatic Precipitator	
List the pollutants for which this devi	ce is intended to control and the ca	pture and control efficiencies.	
Pollutant	Capture Efficiency	Control Efficiency	
VOC's	90%	90%	
Explain the characteristic design para bags, size, temperatures, etc.).	meters of this control device (flow	rates, pressure drops, number of	
 Packed bed scrubber Max pressure drop 18 in. H₂O 8,400 acfm 			
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes Yes			
If Yes, Complete ATTACHMENT H			
If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.			
Describe the parameters monitored and/or methods used to indicate performance of this control device.			
 Liquor flow rate >150 gpm Caustic solution used as necessary to control odors. Daily logs of the amount of Larvin produced. 			

ATTACHMENT G - Air Pollution Control Device Form			
Control device ID number: A331	List all emission units associated with this control device. B-1, B-2		
Manufacturer: Young	Model number: VM 96-25	Installation date: 1983	
Type of Air Pollution Control Device:			
<u>X</u> Baghouse/Fabric Filter	Venturi Scrubber	Multiclone	
Carbon Bed Adsorber P	acked Tower Scrubber	Single Cyclone	
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank	
Catalytic Incinerator	Condenser	Settling Chamber	
Thermal Incinerator	Flare	Other (describe)	
Wet Plate Electrostatic Precipitator		Dry Plate Electrostatic Precipitator	
List the pollutants for which this device	ce is intended to control and the ca	pture and control efficiencies.	
Pollutant	Capture Efficiency	Control Efficiency	
Particulate Matter	99.9%	99.9%	
 Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse with backup filter Air to cloth ratio 4.3 9,000 acfm Reverse Pulse Jet Pressure Drop 7 in. H₂O 			
Is this device subject to the CAM requirements of 40 C.F.R. 64?YesX_No If Yes, Complete ATTACHMENT H If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.			
 Describe the parameters monitored and/or methods used to indicate performance of this control device. Pressure drop monitored monthly to ensure no breakthrough or excessive blinding. 			

ATTACHMENT G - Air Pollution Control Device Form				
Control device ID number:	List all emission units associated with this control device.			
A332	B-3, B-4, E-39			
Manufacturer:	Model number:	Installation date:		
Herding Filtration	HSL 1500-24/18GZ	2011		
Type of Air Pollution Control Device:				
<u>X</u> Baghouse/Fabric Filter	Venturi Scrubber	Multiclone		
Carbon Bed Adsorber P	acked Tower Scrubber	Single Cyclone		
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank		
Catalytic Incinerator	Condenser	Settling Chamber		
Thermal Incinerator	Flare	Other (describe)		
Wet Plate Electrostatic Precipitator		Dry Plate Electrostatic Precipitator		
List the pollutants for which this devi	ce is intended to control and the ca	pture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency		
Particulate Matter	99.9%	99.9%		
 Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse with backup filter 14,000 acfm Air to Cloth Ratio 4.4 Pressure Drop 7 in. H₂ 0 				
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes Yes				
If Yes, Complete ATTACHMENT H If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.				
Describe the parameters monitored and/or methods used to indicate performance of this control device.				
• Pressure drop monitored monthly to ensure no breakthrough or excessive blinding.				

ATTACHMENT G - Air Pollution Control Device Form				
Control device ID number: B330 (Backup Process Flare)	List all emission units associated with this control device. E-26, E-27, E-28, E-29, E-30, E-31, E-32, E-33, E-34, E-35, E-36, E-37, E-38, E-40, E-41, E-42, E-43, E-44, E-45, E048, E-49			
	T-4, T-5, T-6, T-11, T-18, T-23, T- 30, T-31, T-32, T-33, T-34, T-35, T	24, T-25, T-26, T-27, T-28, T-29, T- Γ-39, T-40, T-41, T-42, T-43		
	TT-1, TT-2			
Manufacturer:	Model number:	Installation date:		
John Zhik	NA	1982		
Type of Air Pollution Control Device:				
Baghouse/Fabric Filter	Venturi Scrubber	Multiclone		
Carbon Bed Adsorber P	acked Tower Scrubber	Single Cyclone		
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank		
Catalytic Incinerator	Condenser	Settling Chamber		
Thermal Incinerator X	Flare	Other (describe)		
Wet Plate Electrostatic Precipitator		Dry Plate Electrostatic Precipitator		
List the pollutants for which this device	ce is intended to control and the ca	pture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency		
VOC's	99.5%	99.5%		
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).				
Backup/Process Flare O 20 M (DTT) ((() ()))				
 0.50 IVIIVI B I U/III (pilot) Ambient feed temperature 				
• Flow rate to afterburner: 1623 l	 Flow rate to afterburner: 1623 lb/hr 			
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes X No				
If Yes, Complete ATTACHMENT H				
If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.				
Describe the parameters monitored an	nd/or methods used to indicate per	formance of this control device.		
 Monthly Method 22 opacity readings to ensure opacity does not exceed 20% Maintain records of natural gas usage Maintain records that show the pilot light is active when the flare is used as the control device. Vent gas hrs maximum of 60 hrs/yr when unit is operating. 				

ATTACHMENT G - Air Pollution Control Device Form				
Control device ID number: B330 (Emergency Flare)	List all emission units associated with this control device. E-26, E-27, E-28, E-29, E-30, E-31, E-32, E-33, E-34, E-35, E-36, E-37, E-38, E-40, E-41, E-42, E-43, E-44, E-45, E048, E-49			
	T-4, T-5, T-6, T-11, T-18, T-23, T- 30, T-31, T-32, T-33, T-34, T-35, T	-24, T-25, T-26, T-27, T-28, T-29, T- Γ-39, T-40, T-41, T-42, T-43		
	TT-1, TT-2			
Manufacturer:	Model number:	Installation date:		
John Zink	NA	1982		
Type of Air Pollution Control Device:				
Baghouse/Fabric Filter	Venturi Scrubber	Multiclone		
Carbon Bed Adsorber F	acked Tower Scrubber	Single Cyclone		
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank		
Catalytic Incinerator	Condenser	Settling Chamber		
Thermal Incinerator X	Flare	Other (describe)		
Wet Plate Electrostatic Precipitator		Dry Plate Electrostatic Precipitator		
List the pollutants for which this devi	ce is intended to control and the ca	pture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency		
VOC's	99.5%	99.5%		
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).				
Backup/Process Flare				
• 0.46 MM BTU/hr (pilot)				
• Flow rate to afterburner: 742,00)0 lb/hr			
• Temperature of feed: 100-150°F				
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes Yes				
If Yes, Complete ATTACHMENT H				
If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.				
Describe the parameters monitored and/or methods used to indicate performance of this control device.				
• May not be used for more than years.	 May not be used for more than two hours per occurrence and may not be used more than once per 15 years. 			

ATTACHMENT G - Air Pollution Control Device Form			
Control device ID number: E-50	List all emission units associated with this control device. $N\!/A$		
Manufacturer:	Model number:	Installation date:	
N/A	N/A	1983	
Type of Air Pollution Control Device:			
<u>X</u> Baghouse/Fabric Filter	Venturi Scrubber	Multiclone	
Carbon Bed Adsorber F	Packed Tower Scrubber	Single Cyclone	
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank	
Catalytic Incinerator	Condenser	Settling Chamber	
Thermal Incinerator	Flare	Other (describe)	
Wet Plate Electrostatic Precipitator		Dry Plate Electrostatic Precipitator	
List the pollutants for which this devi	ce is intended to control and the c	apture and control efficiencies.	
Pollutant	Capture Efficiency	Control Efficiency	
N/A	N/A	N/A	
 Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Design Capacity: 29,605 lbs/hr 			
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No			
If Yes, Complete ATTACHMENT H			
If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.			
Describe the parameters monitored and/or methods used to indicate performance of this control device. N/A 			

ATTACHMENT G - Air Pollution Control Device Form			
Control device ID number: B332 (PTO)	List all emission units associated with this control device. E-26, E-27, E-28, E-29, E-30, E-31, E-32, E-33, E-34, E-35, E-36, E-37, E-38, E-40, E-41, E-42, E-43, E-44, E-45, E048, E-49 T-4, T-5, T-6, T-11, T-18, T-23, T-24, T-25, T-26, T-27, T-28, T-29, T- 30, T-31, T-32, T-33, T-34, T-35, T-39, T-40, T-41, T-42, T-43 TT-1, TT-2		
Manufacturer:	Model number:	Installation date:	
Process Combustion Corporation	N/A	2011	
Type of Air Pollution Control Device:			
Baghouse/Fabric Filter	Venturi Scrubber	Multiclone	
Carbon Bed AdsorberI	Packed Tower Scrubber	Single Cyclone	
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank	
Catalytic Incinerator	Condenser;	Settling Chamber	
X Thermal Incinerator	Flare	Other (describe)	
Wet Plate Electrostatic Precipitator Dry Plate Electrostatic Precipitat		Dry Plate Electrostatic Precipitator	
List the pollutants for which this devi	ce is intended to control and the ca	pture and control efficiencies.	
Pollutant	Capture Efficiency	Control Efficiency	
VOC's	99.9%	99.9%	
Explain the characteristic design para bags, size, temperatures, etc.).	meters of this control device (flow	rates, pressure drops, number of	
 Process Thermal Oxidizer Temperature of gas exiting the combustion chamber >1750°F max 			
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes X_No			
If Yes, Complete ATTACHMENT H			
If No, Provide justification . Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.			
Describe the parameters monitored an	nd/or methods used to indicate per	formance of this control device.	
 Monthly Method 22 opacity readings to ensure opacity does not exceed 20% Monitor temperature of gases exiting combustion chamber to maintain minimum temperature of 1750°F Maintain records showing the pilot light is active when the PTO is used as the control device. 			

ATTACHMENT G - Air Pollution Control Device Form				
Control device ID number: C332 (Scrubber)	List all emission units associated with this control device. E-26, E-27, E-28, E-29, E-30, E-31, E-32, E-33, E-34, E-35, E-36, E-37, E-38, E-40, E-41, E-42, E-43, E-44, E-45, E048, E-49 T-4, T-5, T-6, T-11, T-18, T-23, T-24, T-25, T-26, T-27, T-28, T-29, T- 30, T-31, T-32, T-33, T-34, T-35, T-39, T-40, T-41, T-42, T-43 TT-1, TT-2			
Manufacturer:	Model number:	Installation date:		
Air Pol	N/A	2011		
Type of Air Pollution Control Device:				
Baghouse/Fabric Filter	Venturi Scrubber	Multiclone		
Carbon Bed Adsorber X	Packed Tower Scrubber	Single Cyclone		
Carbon Drum(s)	Other Wet Scrubber	Cyclone Bank		
Catalytic Incinerator	Condenser	Settling Chamber		
Thermal Incinerator	Flare	Other (describe)		
Wet Plate Electrostatic Precipitator		Dry Plate Electrostatic Precipitator		
List the pollutants for which this devi	ce is intended to control and the ca	pture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency		
VOC's	99.9%	99.9%		
Explain the characteristic design para bags, size, temperatures, etc.).	meters of this control device (flow	rates, pressure drops, number of		
 Packed Bed Scrubber Liquor flow rate of scrubber >250 gpm 				
Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes X_No				
If Yes, Complete ATTACHMENT H If No, Provide justification. Device emission limitations and standards already established under existing Title V Permit. Subject to 40CFR, Subpart MMM, PAI MACT.				
 Describe the parameters monitored and/or methods used to indicate performance of this control device. Monthly Method 22 opacity readings to ensure opacity does not exceed 20% Monitor liquor flow rate to maintain minimum flow rate of 250 gpm 				

Attachment H

Compliance Assurance Monitoring (CAM) Plan Forms

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <u>http://www.epa.gov/ttn/emc/cam.html</u>

	CAM APPLICABILITY DETERMINATION
1) Do sep CF det the	bes the facility have a PSEU (Pollutant-Specific Emissions Unit considered parately with respect to <u>EACH</u> regulated air pollutant) that is subject to CAM (40 R Part 64), which must be addressed in this CAM plan submittal? To \Box YES \boxtimes NO ermine applicability, a PSEU must meet <u>all</u> of the following criteria (<i>If No, then</i> <i>remainder of this form need not be completed</i>):
a.	The PSEU is located at a major source that is required to obtain a Title V permit;
b.	The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is <u>NOT</u> exempt;
	LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:
	• NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
	• Stratospheric Ozone Protection Requirements.
	• Acid Rain Program Requirements.
	• Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
	• An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
c.	The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
d.	The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
e.	The PSEU is <u>NOT</u> an exempt backup utility power emissions unit that is municipally-owned.
	BASIS OF CAM SUBMITTAL
2) M per	ark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V mit:
	<u>RENEWAL APPLICATION</u> . <u>ALL</u> PSEUs for which a CAM plan has <u>NOT</u> yet been approved need to be addressed in this CAM plan submittal.

<u>INITIAL APPLICATION</u> (submitted after 4/20/98). <u>ONLY</u> large PSEUs (i. e., PSEUs with potential postcontrol device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

SIGNIFICANT MODIFICATION TO LARGE PSEUs. **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, <u>Only</u> address the appropriate monitoring requirements affected by the significant modification.

3) ^a BACKGROUND DATA AND INFORMATION						
Complete the following table for all PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU In order to supplement the submittal						
PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	^b EMISSION LIMITATION or STANDARD	° MONITORING REQUIREMENT	
The Larvin Unit has	The Larvin Unit has no PSEUs that need to be addressed in a CAM plan submittal.					
EXAMPLE Boiler No. 1	Wood-Fired Boiler	РМ	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone	

^a If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

^b Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

^c Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA				
Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR \$64.3 and \$64.4. if more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.				
4a) PSEU Designation:	4b) Pollutant:	4c) ^a Indicator No. 1:	4d) ^a Indicator No. 2:	
5a) GENERAL CRITER Describe the <u>MONITO</u> used to measure the i	RIA RING APPROACH ndicators:			
^b Establish the appropriation of the procedure of the procedure of the indicator range we reasonable assurance of the indicator range we reasonable assurance of the indicator processor of the indicator of the	riate <u>INDICATOR</u> ares for establishing hich provides a of compliance:			
5b) PERFORMANCE C Provide the <u>SPECIFIC</u> <u>OBTAINING REPRESEN</u> as detector location, i specifications, and m accuracy:	RITERIA ATIONS FOR TATIVE DATA, such installation inimum acceptable			
^c For new or modified monitoring equipment, provide <u>VERIFICATION</u> <u>PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE</u> OPERATIONAL STATUS of the monitoring:				
Provide <u>QUALITY ASSURANCE AND</u> <u>QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):				
^d Provide the <u>MONITORING FREQUENCY</u> :				
Provide the <u>DATA COLLECTION</u> <u>PROCEDURES</u> that will be used: Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:				

^a Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

^b Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

^c The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

^d Emission units with post-control PTE \geq 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION		
Complete this section for <u>EACH</u> PSEU that needs to be addressed in this section is to be used to provide rationale and justification for the select meet the submittal requirements specified in 40 CFR §64.4.	is CAM plan submittal. This section may be copied as needed for each PSEU. This ion of <u>EACH</u> indicator and monitoring approach and <u>EACH</u> indicator range in order to	
6a) PSEU Designation:	6b) Regulated Air Pollutant:	
7) INDICATORS AND THE MONITORING APPI	ROACH : Provide the rationale and justification for the selection of the indicators	
(1) INDICATORS AND THE MONTORING APPI and the monitoring approach used to measure the indicators. Also any differences between the verification of operational status of recommendations. (If additional space is needed, attach and label a	COACH : Provide the rationale and justification for the selection of the indicators oprovide any data supporting the rationale and justification. Explain the reasons for or the quality assurance and control practices proposed, and the manufacturer's accordingly with the appropriate PSEU designation and pollutant):	
8) <u>INDICATOR RANGES</u> : Provide the rationale and justific indicate how <u>EACH</u> indicator range was selected by either a <u>COMPL</u> <u>ASSESSMENTS</u> . Depending on which method is being used for each indicator range. (If additional comes is needed attach and label acc.)	ration for the selection of the indicator ranges. The rationale and justification shall <u>LANCE OR PERFORMANCE TEST</u> , a <u>TEST PLAN AND SCHEDULE</u> , or by <u>ENGINEERING</u> indicator range, include the specific information required below for that specific vortingly with the appropriate <u>PSEU</u> designation and pollutant):	
 <u>COMPLIANCE OR PERFORMANCE TEST</u> (Indicator range compliance or performance test conducted under regulatory spu under anticipated operating conditions. Such data may be supp rationale and justification shall <u>INCLUDE</u> a summary of the con and documentation indicating that no changes have taken place selected indicator ranges since the compliance or performance to 	es determined from control device operating parameter data obtained during a ecified conditions or under conditions representative of maximum potential emissions obemented by engineering assessments and manufacturer's recommendations). The npliance or performance test results that were used to determine the indicator range, e that could result in a significant change in the control system performance or the test was conducted.	
• <u>TEST PLAN AND SCHEDULE</u> (Indicator ranges will be deter performing any other appropriate activities prior to use of the m implementation plan and schedule that will provide for use of t that in no case shall the schedule for completing installation an	ermined from a proposed implementation plan and schedule for installing, testing, and nonitoring). The rationale and justification shall <u>INCLUDE</u> the proposed he monitoring as expeditiously as practicable after approval of this CAM plan, except d beginning operation of the monitoring exceed 180 days after approval.	
 <u>ENGINEERING ASSESSMENTS</u> (Indicator Ranges or the pr assessments and other data, such as manufacturers' design criter control device, or PSEU make compliance or performance testi demonstrating that compliance testing is not required to establi 	rocedures for establishing indicator ranges are determined from engineering eria and historical monitoring data, because factors specific to the type of monitoring, ing unnecessary). The rationale and justification shall <u>INCLUDE</u> documentation sh the indicator range.	
RATIONALE AND JUSTIFICATION:		
The Larvin Unit is subject to 40CFR, Subpart MMM, limitations and standards are established under existing	PAI MACT. Therefore, the Larvin process emission ng Title V Permit and this regulation.	