



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: February 7, 2013

RE: Vertellus Agriculture & Nutrition Specialties LLC / 097 - 32214 - 00315

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



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Mr. James Gross
Environmental Specialist
Vertellus Agriculture & Nutrition Specialties, LLC
1500 South Tibbs Avenue
Indianapolis, Indiana 46241

February 7, 2013

Re: 097-32214-00315
Significant Permit Modification to
Part 70 Renewal No.: T 097-27757-00315

Dear Mr. James Gross:

Vertellus Agriculture & Nutrition Specialties, LLC was issued a Part 70 Operating Permit Renewal on January 30, 2012 for a stationary industrial organic chemical plant. A letter requesting changes to this permit was received on August 16, 2012. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changing the Parametric Monitoring condition of the baghouse controlling the packaging facility and the Testing conditions of the baghouse controlling the Iron Oxide storage system.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Ghassan Shalabi, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Ghassan Shalabi or extension 4-5378, or dial (317) 234-5378.

Sincerely,

Tripurari P. Sinha, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments:
Updated Permit
Technical Support Document

GS

Vertellus Agriculture & Nutrition Specialties, LLC
Indianapolis, Indiana

Page 2 of 2
Significant Permit Modification No.: 097-32214-00315

cc: File – Marion County
Marion County Health Department
U.S. EPA, Region V

Mr. Brian Bence
Vertellus Agriculture & Nutrition Specialties, LLC
1500 South Tibbs Avenue
Indianapolis, Indiana 46241



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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

Vertellus Agriculture & Nutrition Specialties LLC
1500 South Tibbs Avenue
Indianapolis, Indiana 46241

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Part 70 Operating Permit No.: T097-27757-00315	
Issued by:	Issuance Date: January 30, 2012
Tripurari P. Sinha, Ph.D., Section Chief Permits Branch Office of Air Quality	Expiration Date: January 30, 2017

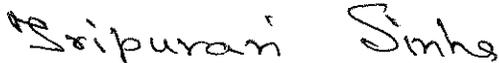
First Significant Permit Modification No.: 097-32214-00315	
Issued by:	Issuance Date: February 7, 2013
 Tripurari P. Sinha, Ph.D., Section Chief Permits Branch Office of Air Quality	Expiration Date: January 30, 2017

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Certification

Emergency Occurrence Report

Part 70 Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary industrial organic chemical plant.

Source Address:	1500 South Tibbs Avenue, Indianapolis, Indiana 46241
General Source Phone Number:	(317) 247-8141 (Extn. 6652)
SIC Code:	2869 & 2833
County Location:	Marion
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Minor Source, Section 112 of the Clean Air Act Minor Source, under Nonattainment NSR Rules 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) waste heat recovery boiler, identified as unit 11-112E, having a maximum heat input capacity of 14.4 MMBtu per hour, identified as HN013 at Plant 41. This boiler was constructed in 1953 and exhausts to stack S-29-001.
- (b) One (1) boiler (identified as unit 28-186N) having a maximum heat input capacity of 36.8 MMBtu per hour and capable of being fired using natural gas, fuel oils No.1, No.2, No.4, No.5, and No.6, process waste gas, and hazardous waste. This boiler has a CO and O₂ CEMS, was constructed in 1959 and exhausts to stack S-29-002. [40 CFR 63, Subpart EEE]
- (c) One (1) boiler (identified as unit 30-2726S) having a maximum heat input capacity of 39.3 MMBtu per hour and fired using natural gas, fuel oils No.1, No.2, No.4, No.5, and No.6, process waste gas, and hazardous waste. This boiler has a CO and O₂ CEMS, was constructed in 1964 and exhausts to stack S-29-003. [40 CFR 63, Subpart EEE]
- (d) One (1) boiler (identified as unit 70-2722W) having a maximum heat input capacity of 91.8 MMBtu per hour and fired using natural gas, fuel oils No.1, No.2, No.4, No.5, and No. 6, process waste gas, and hazardous waste. This boiler has a CO and O₂ CEMS, was constructed in 1969 and exhausts to stack S-29-004. [40 CFR 63, Subpart EEE]
- (e) One (1) landfill gas and natural gas-fired boiler (identified as unit CB600-300) having a maximum heat input capacity of 25.1 MMBtu per hour. The boiler also burns miscellaneous emissions from the wastewater treatment plant. This boiler was installed in 1990 and exhausts to stack S-29-005. [40 CFR 60, Subpart Dc]
- (f) One (1) landfill gas and natural gas-fired boiler (identified as unit CN5-400) having a maximum heat input capacity of 61.1 MMBtu per hour. This boiler was constructed in 1995 and exhausts to stack S-29-006. [40 CFR 60, Subpart Dc]

- (g) One (1) natural gas-fired boiler (identified as unit CB-70K) having a maximum heat input capacity of 91.1 MMBtu per hour. This boiler may also be fired using fuel oils No.1, No.2, No.4, No.5, and No.6. This boiler was installed in 1999 and exhausts to stack S-29-007. [40 CFR 60, Subpart Dc]
- (h) Thirteen (13) process heaters, including:
- (1) One (1) Born heater (identified as unit 722804) having a maximum heat input capacity of 6.7 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1972.
 - (2) One (1) Born hot oil heater (identified as unit BX2707V) having a maximum heat input capacity of 16.0 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1967 and exhausts to stack S-27-001.
 - (3) One (1) Born heater (identified as unit BXS2706Q) having a maximum heat input capacity of 6.0 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1962.
 - (4) One (1) Born heater (identified as unit BS2740Q) having a maximum heat input capacity of 6.0 MMBtu per hour and fired using natural gas, fuel oil #5, and/or process emissions. This unit was installed in 1963.
 - (5) One (1) Born heater (identified as unit BT2728S) having a maximum heat input capacity of 6.0 MMBtu per hour and fired using natural gas, fuel oil #5, and/or process emissions. This unit was installed in 1964.
 - (6) One (1) BM Furnace (identified as unit BM2724W) having a maximum heat input capacity of 21.38 MMBtu per hour and fired using natural gas, fuel oil #5 and/or process emissions and/or process waste gas. This unit was installed in 1969 and exhausts to stack S-27-003.
 - (7) One (1) BD Furnace (identified as unit BD2714V) having a maximum heat input capacity of 15.0 MMBtu per hour and fired using natural gas, fuel oil #5, and/or process emissions and/or process waste gas. This unit was installed in 1968 and exhausts to stack S-27-002.
 - (8) One (1) Born heater (identified as unit EP2729Q) having a maximum heat input capacity of 3.0 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1963.
 - (9) One (1) Born Furnace (identified as unit 732714) having a maximum heat input capacity of 56.5 MMBtu per hour and fired using natural gas and/or process waste gas and/or process emissions. This unit was installed in 1974 and exhausts to stack S-27-005.
 - (10) One (1) CS Kettle equipped with a 5 MMBtu per hour Born heater, which is fired using natural gas. This unit is located in Plant 47 and was constructed in 1979; and
 - (11) One (1) CS Still equipped with an 8.48 MMBtu per hour Born heater, which is fired using natural gas. This unit is located in Plant 47 and was constructed in 1979.
 - (12) One (1) Born Hot Oil Furnace (Process Heater), identified as HW-925.001, constructed in 1997, with maximum heat input capacity of 9.8 MMBtu/hr, burning natural gas or process residue or process emissions, exhausting to stack S-66-003, located in Plant 66.

- (13) One (1) Born Hot Oil Furnace (Process Heater), identified as unit 2607T, constructed in 1965, with maximum heat input capacity of 3.6 MMBtu per hour and fired using natural gas only. The unit is located in Plant 38.
- (i) Wastewater handling operations, Plant 49, including one (1) Wastewater Treatment Plant, constructed in 1989, having a nominal throughput capacity of 350 gallons of wastewater per minute. The Wastewater Treatment Plant treats wastewater from Plants 27, 38, 40, 41, 47, 48. Plant sewers are pumped to wastewater storage tanks for processing. Depending on the contents of the wastewater, the wastewater may be pH adjusted, clarified, filtered, and/or steam stripped as needed prior to discharge to the POTW. The Wastewater Treatment Plant consists of one (1) large surge volume tank (identified as the North API), four (4) wastewater storage tanks (identified as tanks 15, 16, 17, and 18), one (1) neutralization tank, one (1) clarification / flocculation tank, one (1) plate and frame filter press, and one (1) steam stripper for press filtrate.
- (j) Plant 27 used to manufacture pyridine and picolines. The plant was initially constructed in 1961 and consists of reactors, a product recovery unit, distillation columns, and four (4) cooling towers. A catalyst regenerator (identified as unit BX27REG) is also located in this plant. The catalyst regenerator, constructed in 1961, has emissions of particulate matter that are controlled using an external cyclone (with same ID as the regenerator), which exhausts to stack S-27-006. A molecular sieves regenerator, constructed in 1990, with VOC emissions controlled by a scrubber, is also located at this plant.
- (k) Plant 38 used to manufacture precursors to various grades of vitamin B-3.
- (1) One (1) B-3 production unit, constructed in 1967, including the following emission units:
- (A) Reactors;
 - (B) Separators;
 - (C) An evaporator with emissions controlled by a scrubber;
 - (D) One (1) packaging facility consisting of the following:
 - (i) one (1) mill (identified as 28-MB), with non-vented pneumatic conveying system,
 - (ii) One (1) pneumatic conveying system identified as Vacuum Receiver 28- VR (known as the hurricane blower) installed in 1997, with a maximum operating capacity of 6,750 pounds per hour. This unit exhausts at stack S-28-002.
 - (iii) One pick-up collector (known as central vac), installed in 1997, with a maximum operating capacity of 150 pounds per hour. This unit exhausts at stack S-28-003.
 - (iv) Micro Pul (known as the downstairs collector), installed in 1991, with a maximum operating capacity of 670 pounds per hour, exhausting at stack S-28-004, and
 - (v) Penthouse collector (known as the MAC dust collector), installed in 2000, with a maximum operating capacity of 1,500 pounds per hour, exhausting at stack S-28 -001.

- (2) One (1) B-3 Spray Column production line, approved for construction in 2011, with a maximum throughput of 11 tons/hr, and consisting of the following process units:
 - (A) One plug flow reactor, without a process vent
 - (B) One liquid/liquid separation unit, without a process vent
 - (C) One spray dry column
 - (D) One product classifier
 - (E) One solid B-3 storage silo
 - (F) One final product packaging line
 - (G) One vertical fixed roof liquid 3-cyanopyridine (3CN) storage tank, identified as MT-1600, with a maximum storage capacity of 51,820 gallon
 - (H) One vertical fixed roof process water storage tank, identified as MT-1700
 - (I) One vertical fixed roof liquid caustic storage tank

The packaging line is uncontrolled. The spray column, product classifier and storage silo are controlled by a single product recovery baghouse, exhausting outdoors.

- (l) Plant 41 used to manufacture pyridine derivatives. The plant was initially constructed in 1968. Plant 41 consists of the following facilities:
 - (1) Reactor;
 - (2) Separation facility with emissions controlled using one (1) 11.0 MMBtu per hour waste gas incinerator (identified as unit HN013), which exhausts to stack S-41-002; and,
 - (3) Distillation.
- (m) Plant 48, used to manufacture a variety of specialty chemicals. The plant was initially constructed in 1972 and consists of reactors (with emissions controlled by a scrubber, identified as AS-14) and distillation facilities.
- (n) Plant 40 is used to produce vinyl pyridine. The plant was initially constructed in 1969. Plant 40 consists of the following process units: reactor, separation, distillation, and vent tank. Emissions are vented through six vents identified as follows:
 - (1) Column #3 Atmospheric Vent (S/V 40/001) used to vent emissions from the separation facilities;
 - (2) Receiver Atmospheric Vents (S/V 40-002A, 40-002B, and 40-002C) used to vent emissions from the distillation facilities;
 - (3) Still Atmospheric Vent (S/V 40-002C) used to vent emissions from the distillation facilities; and
 - (4) Vent tank (S/V 40-004) used to vent emissions from Columns 1, 2, and 4.

- (o) Plant 47 is used to manufacture a variety of specialty chemicals. The plant was initially constructed in 1979, modified in 2011 and consists of the following facilities:
 - (1) Reactor, controlled by a scrubber;
 - (2) Distillation;
 - (3) Separation;
 - (4) One (1) 0.4 MMBtu per hour waste gas flare (identified as unit HC47GFS), used to control emissions from Plant 47. This unit was installed in 1979 and exhausts to stack S-47-001;
 - (5) Continuous and batch reactors, constructed in 2011, vented to scrubber GK-900, as required, and exhausted to stack XX.
 - (6) Extraction and recovery operations, constructed in 2011, vented to scrubber GK-900, as required, and exhausted to stack XX.
 - (7) Condenser and decanter separations, constructed in 2011, vented to scrubber GK-900, and exhausted to stack XX.
 - (8) Batch distillation, constructed in 2011, exhausted to scrubber GK-900 stack XX.
 - (9) Liquid loading of intermediates and products into totes and tanker trucks, constructed in 2011, vented to atmosphere.
 - (10) One (1) storage silo, constructed in 2011, with a maximum loading rate of 30 tons per hour and a maximum unloading rate of 1.8 tons per hour, equipped with a dust collector for particulate control, and exhausted to stack XX.
- (p) Reserved
- (q) One (1) storage tank identified as 254, located at Plant 27, having a maximum storage capacity of 19,858 gallons and used to store benzene. This storage tank was constructed in 1990 and is equipped with an internal floating roof.
- (r) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 27:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 27	212	6,169	Prior to 1980

- (s) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 41:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 41	211	6,169	Prior to 1980
	213	6,169	1980, replaced in 2006
	236	6,169	1980

- (t) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 40

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 40	304	6,169	1963

- (u) Three (3) storage tanks (identified as 200, 201, and 202) located at Plant 27, each with a storage capacity of 51,500 gallons, and used to store formaldehyde. These tanks were constructed in 1989.

- (v) The following storage tanks with storage capacities less than 10,000 gallons are to be used to store benzene:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 27	234	7,638	Prior to 1980
	233	7,638	Prior to 1980

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) One (1) storage tank subject to 40 CFR 60, Subpart Kb and 326 IAC 12:

Plant Location	Tank ID	Storage Capacity (gallons)	Constructed on or Before
Plant 29	2969	93,957	1996

- (b) Insignificant storage tanks with VOC emissions less than 3 pounds per hour or 15 pounds per day; single HAP emissions less than 5 pounds per day or 1 ton per year; and combined HAP emissions less than 12.5 pounds per day or 2.5 tons per year, including:

Plant 27		
Tank ID	Storage Capacity (gallons)	Construction Date
45	<5,000	Prior to 1980
60	259,096	Prior to 1980
61	259,096	Prior to 1980
62	259,096	Prior to 1980
63	259,096	Prior to 1980
67	259,096	Prior to 1980
70	259,096	Prior to 1980
71	259,096	Prior to 1980
72	259,096	Prior to 1980
73	259,096	Prior to 1980
101	51,702	1961
102	51,702	Prior to 1980
103	51,702	Prior to 1980
105	132,192	1963

Plant 27		
Tank ID	Storage Capacity (gallons)	Construction Date
106	132,192	Prior to 1980
107	132,192	Prior to 1980
108	131,750	Prior to 1980
109	132,192	Prior to 1980
110	132,192	Prior to 1980
112	51,702	Prior to 1980
113	51,702	Prior to 1980
116	51,702	Prior to 1980
117	51,702	Prior to 1980
118	26,227	Prior to 1980
161	<5,000	Prior to 1980
200	51,702	1989 (<3.5 kPa)
201	51,702	1989 (<3.5 kPa)
202	51,702	1989 (<3.5 kPa)
203	51,702	Prior to 1980
204	51,702	Prior to 1980
205	51,702	Prior to 1980
206	51,702	Prior to 1980
207	51,702	1961
208	19,858	1962
209	19,858	Prior to 1980
210	19,858	Prior to 1980
240	19,858	Prior to 1980
241	19,858	Prior to 1980
242	19,858	Prior to 1980
243	19,858	Prior to 1980
244	19,858	Prior to 1980
250	19,858	Prior to 1980
251	19,858	Prior to 1980
252	19,858	Prior to 1980
253	19,858	Prior to 1980
255	3,071	Prior to 1980
256	3,071	Prior to 1980
257	3,071	Prior to 1980
260	44,910	Prior to 1980
261	44,910	Prior to 1980
262	322,402	Prior to 1980
263	322,402	Prior to 1980
270	25,381	Prior to 1980
270-1	<5,000	Prior to 1980
270-2	<5,000	Prior to 1980
271	8,813	Prior to 1980

Plant 27		
Tank ID	Storage Capacity (gallons)	Construction Date
272	8,813	Prior to 1980
273	8,813	Prior to 1980
274	28,287	Prior to 1980
299	5,264	Prior to 1980
411	19,858	Prior to 1980
412	19,858	Prior to 1980
413	19,858	Prior to 1980
414	19,858	Prior to 1980
415	19,858	Prior to 1980
421	19,858	Prior to 1980
422	19,858	Prior to 1980
423	19,858	Prior to 1980
424	19,858	Prior to 1980
425	19,858	Prior to 1980
431	19,858	Prior to 1980
432	19,858	Prior to 1980
433	19,858	Prior to 1980
434	19,858	Prior to 1980
435	19,858	Prior to 1980
441	19,858	Prior to 1980
442	19,858	Prior to 1980
443	19,858	Prior to 1980
444	19,858	Prior to 1980
445	19,858	Prior to 1980
451	19,858	Prior to 1980
452	19,858	Prior to 1980
453	19,858	Prior to 1980
454	19,858	Prior to 1980
455	19,858	Prior to 1980
457	4,888	1993
458	4,888	1993
528	13,154	Prior to 1980
529	13,154	Prior to 1980
600	6,169	1973
601	20,728	1973
602	20,728	1973
603	20,728	1973
604	20,728	1973
605	20,728	1973
606	20,728	1973
607	29,940	1973
608	29,940	1973

Plant 27		
Tank ID	Storage Capacity (gallons)	Construction Date
609	50,668	1998 (<3.5 kPa)
610	27,637	1995 (<15.0kPa)
611	29,940	1971
612	29,940	1973
620	29,940	1969
621	29,940	Prior to 1980
622	29,940	Prior to 1980
630	29,940	Prior to 1980
631	29,940	Prior to 1980
632	29,940	Prior to 1980
640	98,703	Prior to 1980
641	98,703	Prior to 1980
650	30,063	1974
651	30,063	1974
699	5,264	1973
750	2,115	Prior to 1980
MS009	<5,000	Prior to 1980
MS109	<5,000	Prior to 1980
MS209	<5,000	Prior to 1980
MS309	<5,000	Prior to 1980
MT-27.XXX	<5,000	Prior to 1980

Plant 29		
Tank ID	Storage Capacity (gallons)	Construction Date
2938	44,945	Prior to 1980
2939	44,945	Prior to 1980
2940	5,264	Prior to 1980
2941	5,264	Prior to 1980
2953	<10,000	Not Available
2954	<10,000	Not Available
2955	<10,000	Not Available
2956	<15,000	Not Available
2957	<15,000	Not Available
2964	239,481	1980
2965	239,481	1980
2966	239,481	1980

Plant 38		
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Tank ID	Storage Capacity (gallons)	Construction Date
85	<5,000	Prior to 1980
86	<5,000	Prior to 1980
200	<10,000	Prior to 1980
201	<10,000	Prior to 1980
204	11,844	Prior to 1980
205	11,844	Prior to 1980
251	<5,000	Prior to 1980
501	5,200	Prior to 1980
502	5,200	Prior to 1980
506	5,200	Prior to 1980
507	5,200	Prior to 1980
508	5,200	Prior to 1980
509	5,200	Prior to 1980
516	5,200	1970
517	5,200	Prior to 1980
518	5,200	1970
519	5,200	Prior to 1980
521	11,750	Prior to 1980
522	11,750	Prior to 1980
523	11,750	Prior to 1980
524	20,305	(Pressure <15 kPa) 1987
525	20,305	(Pressure <15 kPa) 1987
526	11,750	1965
600	317	Prior to 1980
603	<5,000	Prior to 1980
652	<5,000	Prior to 1980
MS-38.XXX	<5,000	Prior to 1980
MS-38.157	<5,000	Prior to 1980

Plant 40		
Tank ID	Storage Capacity (gallons)	Construction Date
001	118	1995
113	3,325	1998
118	2,961	1963
256	55	1963
264	16	1987
265	<5,000	1963
300	2,221	1963
301	2,221	1980
302	6,169	1995
303	6,169	1984
305	19,858	1989 (Pressure <15.0 kPa)

Plant 40		
Tank ID	Storage Capacity (gallons)	Construction Date
311A	2,056	1963
311B	1,542	1963
311C	2,056	1963
312	6,169	1963
313	6,169	1963
314	6,169	1963
321	21,997	1963
322	21,997	1963
323	21,997	1963
324	29,940	1963
331	21,997	1981
332	21,997	1963
333	29,940	1963
334	29,940	1963
335	21,997	1997(<15.0 kPa)
341	21,997	1963
342	21,997	1963
343	21,997	1963
344	21,997	1963
350	21,997	1980
351	21,997	1963
352	21,997	1963
353	21,997	1963
354	11,750	1963
355	11,750	1963
356	11,750	1963
357	11,750	1963
358	11,750	1963
359	19,060	1991
360	17,450	1991
361	12,925	1963
362	2,133	1963
363	12,925	1963
364	7,689	1963
366	11,875	1989
367	11,875	1989
368	6,169	1989
370	2,327	1963
371	5,181	1963
372	21,997	1963
373	25,212	1963
399	6,169	1963

Plant 41		
Tank ID	Storage Capacity (gallons)	Construction Date
1	14,898	Prior to 1980
2	14,898	Prior to 1980
3	14,898	Prior to 1980
4	14,898	Prior to 1980
5	14,898	Prior to 1980
6	14,898	Prior to 1980
7	14,898	Prior to 1980
8	14,898	Prior to 1980
9	14,898	Prior to 1980
10	14,898	Prior to 1980
11	16,351	Prior to 1980
12	16,351	Prior to 1980
13	16,351	Prior to 1980
14	16,351	Prior to 1980
15	15,276	Prior to 1980
16	16,351	Prior to 1980
18	15,276	Prior to 1980
19	15,276	Prior to 1980
21	5,875	Prior to 1980
23	2,115	Prior to 1980
24	2,115	Prior to 1980
25	2,005	Prior to 1980
26	2,009	Prior to 1980
30	16,351	Prior to 1980
31	16,351	Prior to 1980
32	16,351	Prior to 1980
33	18,483	Prior to 1980
34	18,483	Prior to 1980
35	18,483	Prior to 1980
36	16,351	Prior to 1980
37	16,351	Prior to 1980
38A	15,228	Prior to 1980
39A	15,228	Prior to 1980
40B	10,998	Prior to 1980
42	5,013	1997
43	5,875	Prior to 1980
44	5,875	Prior to 1980
45	5,875	Prior to 1980
46	5,875	Prior to 1980
47	6,169	Prior to 1980
48	6,169	Prior to 1980

Plant 41		
Tank ID	Storage Capacity (gallons)	Construction Date
50	12,690	Prior to 1980
56	9,953	Prior to 1980
214	6,169	1994
215	30,551	Prior to 1980
216	19,858	2001(Pressure <15.0 kPa)
217	19,858	Prior to 1980
218	19,858	Prior to 1980
219	19,858	Prior to 1980
220	19,858	Prior to 1980
221	19,858	Prior to 1980
222	19,858	Prior to 1980
223	19,858	Prior to 1980
224	19,858	Prior to 1980
225	19,858	1996 (Pressure <15.0 kPa)
226	19,858	1962
227	19,858	Prior to 1980
228	19,858	Prior to 1980
229	19,858	Prior to 1980
230	19,858	Prior to 1980
232	20,851	Prior to 1980
235	21,844	Prior to 1980
MS-36	<5,000	Prior to 1980
MS-161	<5,000	Prior to 1980
MT-6	<5,000	Prior to 1980

Plant 47		
Tank ID	Storage Capacity (gallons)	Construction Date
21	1,481	1979
22	1,481	1979
52	<5,000	1979
501	2,538	1999
514	1,800	1979
700	10,152	1979
701	10,152	1979
702	10,152	1992
706	10,152	1979
710	4,402	1979
711	4,402	1979
712	7,638	1979
714	7,826	1979

Plant 47		
Tank ID	Storage Capacity (gallons)	Construction Date
2649	8,000	1957
2650	12,000	1994
2651	12,000	1994
2652	12,442	1995
716	11,844	1979
717	10,152	1979
718	10,152	1979
719	10,152	1979
720	10,152	1979
721	10,152	1979
722	10,152	1979
726	10,152	1979
727	10,152	1979
728	10,152	1979
750	3,455	1979
751	3,455	1979
752	3,455	1979
753	3,455	1991
754	3,455	1979
755	3,455	1979
756	3,455	1979
757	3,455	1979
758	3,455	1979
759	3,455	1979
760	3,455	1979
761	3,455	1979
762	3,455	1979
763	3,455	1979
764	3,455	1979
766	6,363	1979
770	6,363	1979
771	6,363	1979
772	10,152	1991
774	10,152	1979
775	21,151	1999 (Pressure <15.0 kPa)
776	21,151	1999 (Pressure <15.0 kPa)
777	10,152	1979
778	10,152	1979
779	10,152	1979
780	6,363	1979
781	6,363	1991
785	3,455	1979

Plant 47		
Tank ID	Storage Capacity (gallons)	Construction Date
790	14,929	1979
791	14,929	1979
792	14,929	1979
793	14,929	1979
794	14,929	1973
795	14,929	1979
797	20,305	(Pressure <15.0 kPa)1998
798	10,152	1997
799	14,806	1979
900	7,000	2011
901	10,000	2011
902	15,000	2011
903	10,000	2011
904	2,500	2011
905	40,000	2011
906	26,000	2011
907	10,000	2011
908	20,000	2011
909	10,000	2011
920	10,000	2011
921	2,600	2011
952	10,000	2011
4715	2,115	1979
4718	<5,000	1979
4723	<5,000	1979
MS-564.001	<5,000	1979
MS-725.013	<5,000	1979
Various Tanks	<5,000 and <10,000	1979
D-100	39,716	1996 (Pressure <15.0 kPa)
D-101	20,305	1996 (Pressure <15.0 kPa)
D-110	2,656	1996
D-111	2,656	1996
D-120	80	1996
D-121	80	1996
D-130	519	1996
D-312	502	1996
D-314	447	1996
D-316	2,656	1996
D-333	2,656	1996
D-410	13,445	1996
D-420	13,445	1996
6105	<5,000	1996

Plant 47		
Tank ID	Storage Capacity (gallons)	Construction Date
Various Tanks	<5,000	1996

Plant 48		
Tank ID	Storage Capacity (gallons)	Construction Date
112	2,115	1973
113	2,115	1973
230	<5,000	Prior to 1980
401	14,394	Prior to 1980
405	5,182	1972
406	5,182	1972
415	<5,000	Prior to 1980
416	247	1997
426	<5,000	Prior to 1980
427	<5,000	Prior to 1980
500	1,071	Prior to 1980
530	11,750	1972
531	11,750	1972
532	11,750	1972
533	11,750	Prior to 1980
535	11,750	1972
536	11,750	Prior to 1980
537	11,750	1988
538	11,750	Prior to 1980
540	6,463	1988
541	6,463	1988
542	6,463	1972
543	6,463	1972
545	6,463	1972
546	6,463	1972
547	6,463	1972
548	6,463	1988
550	6,463	1972
551	6,463	1972
552	6,463	1972
553	6,463	1972
555	6,463	Prior to 1980
556	6,463	Prior to 1980
557	6,463	Prior to 1980
558	9,253	Prior to 1980
606	176	Prior to 1980

Plant 48		
Tank ID	Storage Capacity (gallons)	Construction Date
706	176	1992
805	<5,000	Prior to 1980
806	242	1994
807	<5,000	Prior to 1980
South Vent Pot	<5,000	Prior to 1980

Plant 49		
Tank ID	Storage Capacity (gallons)	Construction Date
CL-101	90,243	1991 (Pressure <3.5 kPa)
101	13,536	1991
106	<5,000	1991
107	16,921	1991
110	12,796	1991
112	<5,000	1991
112-1	<5,000	1991
114	<5,000	1991
115	<5,000	1991
116	1,692	1991
203	<5,000	1991
4915	117,504	1980
4916	117,504	Prior to 1980
4917	476,595	Prior to 1980
4918	476,595	Prior to 1980
4919	17,626	Prior to 1980
4921	16,921	1991
4923	3,966	1991
4927	1,469	1991
4929	8,813	1991
4931	1,469	Prior to 1980
4935	1,469	1991
900433	500	1991
921052	500	1991
CAU-1	<10,000	1991
CAU-2	<10,000	1991
F-1	<5,000	1991
F-2	<5,000	1991
F-3	<5,000	1991
Various Tanks	50,000	1991 (Pressure <3.5 kPa)
Various Tank	21,493	1991 (Contains N2)
Various Tanks	<10,000	Various Dates

- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (d) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (e) Cold cleaning operations with potential emissions of less than three (3) pounds per hour (lbs/hr) or fifteen (15) pounds per day (lbs/day) of VOC.
- (f) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (g) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (h) Combustion source flame safety purging on startup.
- (i) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (j) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (k) Cleaners and solvents characterized as follows: (A) having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or; B) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (l) Closed loop heating and cooling systems.
- (m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (n) Heat exchanger cleaning and repair.
- (o) Paved and unpaved roads and parking lots with public access. [326 IAC 2-6-4]
- (p) Asbestos abatement projects regulated by 326 IAC 14-10.
- (q) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (r) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (s) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (t) Stationary fire pumps.
- (u) Purge double block and bleed valves.
- (v) Filter or coalescer media changeout.

- (w) A laboratory as defined in 326 IAC 2-7-1(21)(D).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T097-27757-00315, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-3-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s), by job titles, responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
 - (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Fax Number 317-232-6749
within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:
 - (A) A description of the emergency;
 - (B) Any steps taken to mitigate the emissions; and
 - (C) Corrective actions taken.The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]
- (h) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determination regarding this source:
 - (1) Plant 38 is not subject to the requirements of 326 IAC 8-5-3, synthesized pharmaceutical manufacturing operations because it emits less than 15 pounds of VOC per day.
 - (2) (A) Plant 27, Plant 38 and Plant 41 are not subject to the requirements of 40 CFR 60, Subpart III – Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Process (326 IAC 12) because these plants
 - (i) Do not have an air oxidation unit; and/or
 - (ii) Do not produce as a product, co-product, by-product, or intermediate any of the chemicals listed in 40 CFR 60.617.
 - (B) Plants 40, 47 and 48 are not subject to the requirements of 40 CFR 60, Subpart III – Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes (326 IAC 12) because these plants do not produce as a product, co-product, by-product, or intermediate any of the chemicals listed in 40 CFR 60.617.
- (3) Plants 27, 38, 40, 41, 47, and 48 are not subject to the requirements of 40 CFR 60, Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (326 IAC 12) and 40 CFR 60 Subpart RRR – Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (326 IAC 12), because these plants do not produce any of the chemicals listed in 40 CFR 60.667 and 40 CFR 60.707 as a product, co-product, by-product, or intermediate.
- (4) None of the storage tanks at this facility are subject to 40 CFR 60, Subpart K because the storage tanks either have capacities of less than 40,000 gallons or they are not used to store petroleum liquids as defined in 40 CFR 60.111(b) and 40 CFR 60.111a(b).

- (5) None of the storage tanks at this facility are subject to the requirements of the New Source Performance Standards 40 CFR 60, Subpart Ka (326 IAC 12) because none of the storage tanks for which construction, reconstruction, or modification commenced after May 19, 1978, and prior to July 23, 1984 have capacities of equal to or greater than 40,000 gallons and are not used to store petroleum liquids as defined in 40 CFR 60.111(b) and 40 CFR 60.111(a)(b).
- (6) The waste gas incinerator located at Plant 47 is not subject to the requirements of 40 CFR 60, Subpart E – Standards of Performance for Incinerators (326 IAC 12) because this incinerator does not burn solid waste. This incinerator doesn't meet the definition of an incinerator in 40 CFR 60.50.
- (7) The source is not subject to the major source requirements of 40 CFR 63, Subpart EEE – National Emissions Standards for Hazardous Air Pollutants for Hazardous Waste Combustors because the source was an area source of HAPS before the compliance date of this regulation. The source will be subject to area source requirements of this regulation.
- (8) The source is not subject to the requirements of 40 CFR 63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing (326 IAC 12) because the source was an area source of HAPs before the compliance date of this regulation.
- (9) The source is not subject to the requirements of 40 CFR 63, Subpart EEEE – National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution (Non-Gasoline) (326 IAC 12) because the source was an area source of HAPs before the compliance date of this regulation.
- (10) The wastewater treatment facility is not subject to the requirements of 40 CFR 63, Subpart DD – National Emissions Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations because the facility has stopped accepting off-site waste for processing in the wastewater treatment plant.
- (11) The source is not subject to the requirements of 40 CFR 60, Subpart VV - New Source Performance Standards for Synthetic Organic Chemical Manufacturing because the only plants that produce any of the chemicals listed in the applicability section of the rule were constructed prior to the applicability date of the rule.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T097-27757-00315 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.18 Permit Revision Under Economic Incentives and Other Programs
[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]**

- (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance

Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.0 SOURCEWIDE OPERATION CONDITIONS

ENTIRE SOURCE

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.0.1 HAP Limits [326 IAC 2-8-4] [326 IAC 12]

- (a) The emissions of any single HAP from the process vents and tanks at Plants 27, 29, 38, 40, 41, 47, 48, and 49 shall be less than 9.90 tons per year
- (b) The emissions of combined HAPs from the process vents and tanks at Plants 27, 29, 38, 40, 41, 47, 48, and 49 shall be less than 24.90 tons per year.

Compliance with these limits renders the major source requirements of 40 CFR 63, Subpart EEE – National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; 40 CFR 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing; and 40 CFR 63, Subpart EEEE – National Emission Standards for Hazardous Air Pollutants for Organic Liquids Distribution not applicable.

Compliance Determination Requirements

D.0.2 HAP Calculations

- (a) In order to comply with Conditions D.0.1(a) and D.0.1(b), the monthly HAP emissions (for individual and combined HAPs) from Plant 27 shall be calculated by the following formula:

$$E_{\text{HAP27}} = W_{\text{HAP27U}} + \sum [W_{\text{HAP27c}} * (1 - C_{\text{eff}})],$$

where: E_{HAP27} = the monthly HAP emissions from Plant 27;

W_{HAP27U} = the monthly Plant 27 HAP emission when operating without control;

W_{HAP27c} = the monthly Plant 27 HAP emission for each process when operating with control; and,

C_{eff} = the control efficiency for each controlled process as determined by the most recent stack test or other means.

- (b) In order to comply with Conditions D.0.1(a) and D.0.1(b), the monthly HAP emissions (for individual and combined HAPs) of Plant 29 shall be calculated by the following formula:

$$E_{\text{HAP29}} = W_{\text{HAP29U}} + \sum [W_{\text{HAP29c}} * (1 - C_{\text{eff}})],$$

where: E_{HAP29} = the monthly HAP emission from Plant 29;

W_{HAP29U} = the monthly Plant 29 HAP emission when operating without control;

W_{HAP29c} = the monthly Plant 29 HAP emission for each process when operating with control; and,

C_{eff} = the flare or boiler control efficiency for each process as determined by the most recent stack test or other means.

- (c) In order to comply with Conditions D.0.1(a), and D.0.1(b), the monthly HAP emissions of Plant

40 shall be calculated by the following formula:

$$E_{HAP40} = W_{HAP40U} + \sum [W_{HAP27c} * (1-C_{eff})],$$

where: E_{HAP40} = the monthly HAP emissions from Plant 40;

W_{HAP40U} = the monthly Plant 40 HAP emission when operating without control;

W_{HAP40c} = the monthly Plant 40 HAP emission for each process when operating with control; and,

C_{eff} = the control efficiency for each controlled process as determined by the most recent stack test or other means.

- (d) In order to comply with Conditions D.0.1(a) and D.0.1(b), the monthly HAP emissions (for individual and combined HAPs) of Plant 41 shall be calculated by the following formula:

$$E_{HAP41} = W_{HAP41U} + \sum [W_{HAP41c} * (1-C_{eff})],$$

where: E_{HAP41} = the monthly HAP emission from Plant 41;

W_{HAP41u} = the monthly Plant 41 HAP emission when operating without control;

W_{HAP41c} = the monthly Plant 41 HAP emission for each process when operating with control; and,

C_{eff} = the thermal oxidizer control efficiency for each process.

- (e) In order to comply with Conditions D.0.1(a), and D.0.1(b), the monthly HAP emissions (for individual and combined HAPs) of Plant 47 shall be calculated by the following formula:

$$E_{HAP47} = W_{HAP47U} + \sum [W_{HAP47c} * (1-C_{eff})],$$

where: E_{HAP47} = the monthly HAP emission from Plant 47;

W_{HAP47u} = the monthly Plant 47 HAP emission when operating without control;

W_{HAP47c} = the monthly Plant 47 HAP emission for each process when operating with control; and,

C_{eff} = the scrubber or flare control efficiency for each process.

- (f) In order to comply with Conditions D.0.1(a), and D.0.1(b), the monthly HAP emissions (for individual and combined HAPs) of Plant 48 shall be calculated by the following formula:

$$E_{HAP48} = W_{HAP48U} + \sum [W_{HAP48c} * (1-C_{eff})],$$

where: E_{HAP48} = the monthly HAP emission from Plant 48;

W_{HAP48u} = the monthly Plant 48 HAP emission when operating without control;

W_{HAP48c} = the monthly Plant 48 HAP emission for each process when operating with control; and,

C_{eff} = the scrubber control efficiency for each process.

- (g) In order to comply with Conditions D.0.1(a), and D.0.1(b), the monthly HAP emissions (for individual and combined HAPs) of Plant 49 shall be calculated by the following formula:

$$E_{HAP49} = W_{HAP49U} + \sum [W_{HAP49c} * (1 - C_{eff})],$$

where: E_{HAP49} = the monthly HAP emission from Plant 49;

W_{HAP49U} = the monthly Plant 49 HAP emission when operating without control;

W_{HAP49c} = the monthly Plant 49 HAP emission for each process when operating with control; and,

C_{eff} = the boiler control efficiency for each process.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.0.3 Record Keeping Requirements

- (a) To document compliance with Condition D.0.1, the Permittee shall maintain records in accordance with (1) through (4) below.
- (1) Actual monthly production for Plants 27, 29, 38, 40, 41, 47, 48, and 49, including periods when the respective control equipment was not in operation;
 - (2) the control efficiency used in the calculations and which control equipment are used;
 - (3) all emission calculations and compliance test results used to determine compliance with Condition D.0.1; and
 - (4) the calculated HAPs emissions.

D.0.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.0.1 shall be submitted to the address listed in Section C- General Reporting Requirements, of this permit, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1 (34).

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

BOILERS

- (a) One (1) waste heat recovery boiler, identified as unit 11-112E, having a maximum heat input of 14.4 MMBtu per hour in Plant 41. This boiler was constructed in 1953 and exhausts to stack S-29-001.
- (b) One (1) boiler (identified as unit 28-186N) having a maximum heat input capacity of 36.8 MMBtu per hour and is capable of being fired using natural gas, fuel oils No.1, No.2, No.4, No.5, and No.6, process waste gas, and hazardous waste. This boiler has a CO and O2 CEMS, was constructed in 1959 and exhausts to stack S-29-002. [40 CFR 63, Subpart EEE]
- (c) One (1) boiler (identified as unit 30-2726S) having a maximum heat input capacity of 39.3 MMBtu per hour and fired using natural gas, fuel oils No.1, No.2, No.4, No.5, and No. 6, process waste gas, and hazardous waste. This boiler has a CO and O2 CEMS, was constructed in 1964 and exhausts to stack S-29-003. [40 CFR 63, Subpart EEE]
- (d) One (1) boiler (identified as unit 70-2722W) having a maximum heat input capacity of 91.8 MMBtu per hour and fired using natural gas, fuel oils No.1, No.2, No.4, No.5, and No. 6, process waste gas, and hazardous waste. This boiler has a CO and O2 CEMS, was constructed in 1969 and exhausts to stack S-29-004. [40 CFR 63, Subpart EEE]
- (e) One (1) landfill gas and natural gas-fired boiler (identified as unit CB600-300) having a maximum heat input capacity of 25.1 MMBtu per hour. The boiler also burns miscellaneous emissions from the wastewater treatment plant. This boiler was installed in 1990 and exhausts to stack S-29-005. [40 CFR 60, Subpart Dc]
- (f) One (1) landfill gas and natural gas-fired boiler (identified as unit CN5-400) having a maximum heat input capacity of 61.1 MMBtu per hour. This boiler was constructed in 1995 and exhausts to stack S-29-006. [40 CFR 60, Subpart Dc]
- (g) One (1) natural gas-fired boiler (identified as unit CB-70K) having a maximum heat input capacity of 91.1 MMBtu per hour. This boiler may also be fired using fuel oils No.1, No.2, No.4, No.5, and No.6. This boiler was installed in 1999 and exhausts to stack S-29-007. [40 CFR 60, Subpart Dc]

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6.5-6-31][326 IAC 6.5-1-2(b)]

- (a) Pursuant to 326 IAC 6.5-6-31 (Particulate Emission Limitations Marion County), the particulate matter emissions from boilers 28-186N, 30-2726S, and 70-2722W shall be limited as follows:

Boiler I.D.	PM Limitation	
	in Tons per year	in lbs per MMBtu
28-186N	12.2 Total Sum of the three	0.15
30-2726S		0.15
70-2722W		0.15

Pursuant to 326 IAC 6.5-6-31(a), compliance with the annual tons per year limitation shall be based on the sum of the monthly emissions for each twelve (12) month period.

- (b) Pursuant to 326 IAC 6.5-1-2(b)(3)(Particulate Emission Limitations), the particulate matter emissions from Boilers CB600-300, CN5-400, and CB-70K shall be limited to 0.01 grains per dry standard cubic foot.
- (c) Pursuant to 326 IAC 6.5-1-2(b)(2) (Nonattainment Area Limitations), the particulate matter emissions from Boiler CB-70K shall be limited to 0.15 pounds per million Btu when burning fuel oil.

D.1.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

The amount of distillate oil and distillate oil equivalents burned in Boiler CB-70K shall not exceed 1,124 kgallons per twelve (12) consecutive month period, with compliance determined at the end of each month. The sulfur content of the fuel oil shall not exceed 0.5% by weight. For the purpose of determining compliance, burning 1 million cubic feet of natural gas is equivalent to burning 1.41 kgallon of distillate fuel.

Compliance with this condition ensures that both the SO₂ and NO_x emissions from Boiler CB-70K do not exceed 39.9 tons per year and makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.3 Sulfur Dioxide Emission Limitations (SO₂) [326 IAC 7-4-2]

Pursuant to 326 IAC 7-4-2 (Marion County Sulfur Dioxide Emission Limitations), emissions of sulfur dioxide from Boilers 28-186N, 30-2726S, and 70-2722W shall not exceed the emission rates provided in the following table:

Boiler I.D.	SO ₂ Emission Limitations	
	lbs per MMBtu	lbs per hour
28-186N	1.25	46.0
30-2726S	1.25	49.1
70-2722W	1.25	114.75

Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

D.1.4 Sulfur Dioxide Emission Limitations (SO₂) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1-1 (SO₂ Emission Limitations), the SO₂ emissions from Boiler CB-70K shall not exceed five tenths (0.5) pounds per million Btu heat input.

D.1.5 National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combusters [40 CFR 63, Subpart EEE]

The area source provisions of 40 CFR 63.1217 (Standards for Liquid Fuel Boilers that Burn Hazardous Waste) apply to Boilers 28-186N, 30-2726S, and 70-2722W. The Permittee must comply with the area source requirements on and after the effective date of 40 CFR 63, Subpart EEE.

Boilers 28-186N, 30-2726S, and 70-2722W are subject to the following portions of 40 CFR 63, Subpart EEE:

- (1) 40 CFR 63.1201
- (2) 40 CFR 63.1206
- (3) 40 CFR 63.1207
- (4) 40 CFR 63.1208
- (5) 40 CFR 63.1209
- (6) 40 CFR 63.1210
- (7) 40 CFR 63.1211
- (8) 40 CFR 63.1217(a)(1)
- (9) 40 CFR 63.1217(a)(2)

- (10) 40 CFR 63.1217(a)(5)
- (11) 40 CFR 63.1217(b)(1)
- (12) 40 CFR 63.1217(b)(2)
- (13) 40 CFR 63.1217(b)(5)
- (14) 40 CFR 63.1217(c)
- (15) 40 CFR 63.1217(d)
- (16) 40 CFR 63.1217(f)

D.1.6 Significant Source Modification Avoidance Limit [326 IAC 2-7-10.5(f)]

- (a) In order to render the requirements of 326 IAC 2-7-10.5(f) not applicable to MSM 097-27202-00315, the total amount of landfill gas combusted in Boilers CB600-300 and CN5-400 shall not exceed 1,000 MMCF per twelve consecutive month period with compliance determined at the end of each month.
- (b) While combusting landfill gas, SO₂ emissions from Boilers CB600-300 and CN5-400 shall be limited to 47.50 lb SO₂/MMCF.

D.1.7 General Provisions Relating to NSPS Dc [326 IAC 12] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12 for Boiler CB-70K. Boiler CB-70K is subject to 40 CFR 60.2 and 40 CFR 60.8.

D.1.8 New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12][40 CFR Part 60, Subpart Dc]

The Permittee who operates Boilers CB600-300, CN5-400, and CB-70K, each constructed after June 9, 1989 with a maximum heat input capacity greater than 10 MMBtu/hr but less than 100 MMBtu/hr shall comply with the following provisions of 40 CFR Part 60, Subpart Dc, included as Attachment A of this permit:

Boilers CB600-300 and CN5-400 are subject to the following portions of Subpart Dc:

- (1) 40 CFR 60.40c
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.48c(a)
- (4) 40 CFR 60.48c(f)(4)
- (5) 40 CFR 60.48c(g)
- (6) 40 CFR 60.48c(i)
- (7) 40 CFR 60.48c(j)

Boiler CB-70K is subject to the following portions of Subpart Dc:

- (1) 40 CFR 60.40c
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.42c(d)
- (4) 40 CFR 60.42c(h)(1)
- (5) 40 CFR 60.42c(j)
- (6) 40 CFR 60.43c(c)
- (7) 40 CFR 60.43c(d)
- (8) 40 CFR 60.44c(g)
- (9) 40 CFR 60.44c(h)
- (10) 40 CFR 60.46c(e)
- (11) 40 CFR 60.47c(c)
- (12) 40 CFR 60.48c(a)
- (13) 40 CFR 60.48c(f)(1)
- (14) 40 CFR 60.48c(f)(4)
- (15) 40 CFR 60.48c(g)
- (16) 40 CFR 60.48c(i)

(17) 40 CFR 60.48c(j)

D.1.9 General Provisions Relating to NESHAPs [326 IAC 20-1] [40 CFR 63, Subpart A][326 IAC 14] [40 CFR 61, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the Boilers 28-186N, 30-2726S, and 70-2722W when burning hazardous waste from offsite except when otherwise specified in 40 CFR 63, Subpart DD

D.1.10 General Standards for 40 CFR 63, Subpart DD [40 CFR 63.683][326 IAC 20-23]

- (a) Pursuant to 40 CFR 63.683(b)(iii), the Permittee shall determine before placing off-site material in off-site material management units that the average volatile organic hazardous air pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee shall review and update this determination at least once every calendar year. If any change in operation increases the average VOHAP concentration of the off-site waste to equal to or greater than 500 ppmw, the Permittee shall comply with all relevant requirements of 40 CFR 63, Subpart DD applicable to off-site material management units.
- (b) Pursuant to 40 CFR 63.683(c)(ii), the Permittee shall determine before placing off-site material in the process equipment associated with the process vent that the average volatile organic hazardous air pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee shall review and update this determination at least once every calendar year. If any change in operation increases the average VOHAP concentration of the off-site waste to equal to or greater than 500 ppmw, the Permittee shall comply with all relevant requirements of 40 CFR 63, Subpart DD applicable to process vents.
- (c) The average VOHAP concentration of the off-site material shall be determined using:
 - (1) The direct measurement approach described in Condition D.1.13(a); or
 - (2) Knowledge of the off-site material as described in Condition D.1.13(b).
- (d) Pursuant to 40 CFR 63.680(c)(3), the total HAP concentration in any pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems shall be less than 10 percent by weight. If any change in operation increases the total HAP concentration to equal to or greater than 10 percent by weight, the Permittee shall comply with the equipment leak requirements of 40 CFR 63, Subpart DD.

Compliance Determination Requirements

D.1.11 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-4-2] [326 IAC 7-2-1]

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions from boilers 28-186N, 30-2726S, and 70-2722W do not exceed the limitations in Condition D.1.3 by:
 - (1) Providing vendor analysis of fossil fuel oil delivered, if accompanied by a vendor certification, or;
 - (2) Analyzing the fossil fuel oil to determine the sulfur content of the fossil fuel oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Fossil fuel oil may be collected from the fuel tank immediately after the fuel tank is filled and before any fossil fuel oil is combusted; and

- (B) If a partially empty fuel oil tank is refilled, a new sample and analysis would be required upon filling.
- (3) For the combustion of hazardous waste, the hazardous waste will be analyzed to determine the sulfur content of the hazardous waste on an annual basis via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Hazardous waste fuel shall be sampled in accordance with the procedures established in Condition D.1.5.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boilers, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.12 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-2-1]

Compliance shall be determined utilizing one of the following options for Boiler CB-70K:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fossil fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
 - (1) Providing vendor analysis of fossil fuel oil delivered, if accompanied by a certification, or;
 - (2) Analyzing the oil sample to determine the sulfur content of the fossil fuel via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the rotary dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.13 Testing Methods and Procedures for 40 CFR 63, Subpart DD [326 IAC 20-23][40 CFR 63.694]

Pursuant to 40 CFR 63.694, the average VOHAP concentration of an off-site material at the point-of-delivery shall be determined using either direct measurement as specified in Condition D.1.10(a) or by knowledge as specified in Condition D.1.10(b).

- (a) Direct measurement to determine VOHAP concentration:
- (1) Sampling
Samples of the off-site material stream shall be collected from the container, pipeline, or other device used to deliver the off-site material stream to the plant site in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.
- (A) The averaging period to be used for determining the average VOHAP concentration for the off-site material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the off-site material stream but shall not exceed 1 year.
- (B) A sufficient number of samples, but no less than four samples, shall be collected to represent the complete range of HAP compositions and HAP quantities that occur in the off-site material stream during the entire averaging period due to normal variations in the operating conditions for the source or process generating the off-site material stream. Examples of such normal variations are seasonal variations in off-site material quantity or fluctuations in ambient temperature.
- (C) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the off-site material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the plant site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR Part 60, Appendix A.
- (2) Analysis
Each collected sample must be prepared and analyzed in accordance with one of the following methods as applicable to the sampled off-site material for the purpose of measuring the HAP listed in Table 1 of 40 CFR 63, Subpart DD:
- (A) Method 305 in 40 CFR Part 63, Appendix A.
- (B) Method 25D in 40 CFR Part 60, Appendix A.
- (C) Method 624 in 40 CFR Part 136, Appendix A. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 must be followed.
- (D) Method 625 in 40 CFR Part 136, Appendix A. For the purpose of using this method to comply with Subpart DD of 40 CFR 63, the owner or operator must perform corrections to these compounds based on the "accuracy as recovery" using the factors in Table 7 of the method. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 must be followed.

- (E) Method 1624 in 40 CFR Part 136, Appendix A.
- (F) Method 1625 in 40 CFR Part 136, Appendix A.
- (G) Method 8260 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. As an alternative, an owner or operator may use any more recent, updated version of Method 8260 approved by the EPA. For the purpose of using Method 8260 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with section 8 of Method 8260, and this program must include the following elements related to measuring the concentrations of volatile compounds:
 - (i) 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.
 - (ii) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.
 - (iii) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.
- (H) Method 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. As an alternative, an owner or operator may use any more recent, updated version of Method 8270 approved by the EPA. For the purpose of using Method 8270 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with Method 8270, and this program must include the following elements related to measuring the concentrations of volatile compounds:
 - (i) 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.
 - (ii) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.
 - (iii) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.
- (I) Any other analysis method that has been validated in accordance with the procedures specified in section 5.1 and section 5.3 and the corresponding calculations in section 6.1 or section 6.3 of Method 301 in Appendix A in 40 CFR part 63. The data are acceptable if they meet the criteria specified in section 6.1.5 or section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range of 0.7 to 1.30. Other sections of Method 301 are not required.

- (3) Calculations
The average VOHAP concentration (C) on a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with Condition D.1.13(b)(2) and the equation in 40 CFR 63.694(b)(2)(iii). If the Permittee uses a test method that provides species-specific chemical concentrations, then the Permittee may adjust the measured concentrations to the corresponding concentration values which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor listed in Table 1 of 40 CFR 63.694.
- (b) Knowledge of the off-site material to determine VOHAP concentration:
 - (1) Documentation shall be prepared that presents the information used as the basis for the Permittee's knowledge of the off-site material stream's average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source or process generating the off-site material stream; species-specific chemical test data for the off-site material stream from previous testing that are still applicable to the current off-site material stream; previous test data for other locations managing the same type of off-site material stream; or other knowledge based on information in documents such as manifests, shipping papers, or waste certification notices.
 - (2) If test data are used as the basis for knowledge, then the Permittee shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VOHAP concentration. For example, the Permittee may use HAP concentration test data for the off-site material stream that are validated in accordance with Method 301 in 40 CFR Part 63, Appendix A as the basis for knowledge of the off-site material.
 - (3) If species-specific chemical concentration test data are used as the basis for knowledge of the off-site material may adjust the test data to the corresponding average VOHAP concentration value which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor (fm305) listed in Table 1 of 40 CFR 63, Subpart DD.
 - (4) In the event that IDEM, OAQ and the Permittee disagree on a determination of the average VOHAP concentration for an off-site material stream using knowledge, then the results from a determination of VOHAP concentration using direct measurement as specified in Condition D.1.13(a) shall be used to establish compliance with the applicable requirements. The IDEM, OAQ may perform or request that the Permittee perform this determination using direct measurement.

D.1.14 Continuous Monitoring of Emissions [326 IAC 3-5] [40 CFR 63, Subpart EEE]

- (a) Pursuant to 326 IAC 3-5-1(d) (Continuous Monitoring of Emissions), the Permittee shall install, calibrate, certify, operate, and maintain continuous emission monitoring systems (CEMS) and related equipment for measuring CO and O₂ in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) The continuous emissions monitoring systems for CO and O₂ shall be operated at all times the emission unit is operating and combusting hazardous waste. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a). [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5].

- (c) All CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (d) In the event that a breakdown of a continuous emission monitoring system required by this permit occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emissions monitoring systems (CEMs and COMs) pursuant to 326 IAC 3-5, 326 IAC 7-4, 40 CFR 60, 40 CFR 63 and/or 40 CFR 75.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.15 Standard Operating Procedure [326 IAC 3-7-5(a)]

Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

D.1.16 CO and O₂ Monitoring System Downtown [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the CO or O₂ continuous emission monitoring system are malfunctioning or down for repairs or adjustments, the Permittee shall not combust hazardous waste.

D.1.17 Visible Emissions Notations

- (a) Visible emission notations of boilers 30-2726S, 70-2722W, 28-186N, and CB-70K stack exhausts shall be performed once per day during normal daylight operations when burning fuel oil or hazardous waste. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.18 Record Keeping Requirements

- (a) In order to document the compliance status with Conditions D.1.1, D.1.3, and D.1.4, the Permittee shall maintain monthly records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fossil fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

- (3) To certify compliance when burning natural gas or process waste gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. 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 this permit.

- (b) In order to document the compliance status with Condition D.1.17, the Permittee shall maintain a daily record of visible emission notations of the stack exhaust of Boilers 30-2726S, 70-2722W, 28-186N and CB-70K. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).
- (c) In order to document the compliance status with Condition D.1.2, the Permittee shall maintain records of the following:
 - (1) The amount and sulfur content of the distillate oil burned in Boiler CB-70K each month; and
 - (2) The amount of natural gas burned in Boiler CB-70K each month.
- (d) In order to document the compliance status with Condition D.1.6, the Permittee shall maintain monthly records of the total amount of landfill gas combusted in Boilers CB600-300 and CN5-400. Records necessary to demonstrate compliance with Condition D.1.6 shall be available within thirty (30) days of the end of each compliance period.
- (e) Section C – General Record Keeping Requirements contains the Permittee’s obligation with regard to the records required by this condition.
- (f) Pursuant to 326 IAC 6.5-6-31(a), the Permittee shall maintain monthly fuel usage records for processes 186 N, 2722 W, and 2726 S that contain sufficient information to estimate emissions including the following:
 - (1) Boiler identification.
 - (2) Fuel usage for each type of fuel.
 - (3) Heat content of fuel.
 - (4) Emission factor used to calculate emissions.

D.1.19 Record Keeping Requirements for 40 CFR 63, Subpart DD

In order to document the compliance status with Condition D.1.10, the Permittee shall maintain records of the initial and annual determinations of the average VOHAP concentration in off-site waste and the total HAP content. All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.20 Reporting Requirements

- (a) Pursuant to 326 IAC 6.5-6-31(a), within thirty (30) days of the end of each calendar quarter, a written report shall be submitted to the department of the monthly emissions for each of the previous twelve (12) months for Boilers 186 N, 2722 W, and 2726 S, including the information in Condition D.1.15(f).

- (b) A quarterly summary of the information to document the compliance status with Condition D.1.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(34).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (h) Thirteen (13) process heaters, including:
- (1) One (1) Born heater (identified as unit 722804) having a maximum heat input capacity of 6.7 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1972.
 - (2) One (1) Born hot oil heater (identified as unit BX2707V) having a maximum heat input capacity of 16.0 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1967 and exhausts to stack S-27-001.
 - (3) One (1) Born heater (identified as unit BXS2706Q) having a maximum heat input capacity of 6.0 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1962.
 - (4) One (1) Born heater (identified as unit BS2740Q) having a maximum heat input capacity of 6.0 MMBtu per hour and fired using natural gas, fuel oil #5, and/or process emissions. This unit was installed in 1963.
 - (5) One (1) Born heater (identified as unit BT2728S) having a maximum heat input capacity of 6.0 MMBtu per hour and fired using natural gas, fuel oil #5, and/or process emissions. This unit was installed in 1964.
 - (6) One (1) BM Furnace (identified as unit BM2724W) having a maximum heat input capacity of 21.38 MMBtu per hour and fired using natural gas, fuel oil #5 and/or process emissions and/or process waste gas. This unit was installed in 1969 and exhausts to stack S-27-003.
 - (7) One (1) BD Furnace (identified as unit BD2714V) having a maximum heat input capacity of 15.0 MMBtu per hour and fired using natural gas, fuel oil #5, and/or process emissions and/or process waste gas. This unit was installed in 1968 and exhausts to stack S-27-002.
 - (8) One (1) Born heater (identified as unit EP2729Q) having a maximum heat input capacity of 3.0 MMBtu per hour and fired using natural gas and/or process emissions. This unit was installed in 1963.
 - (9) One (1) Born Furnace (identified as unit 732714) having a maximum heat input capacity of 56.5 MMBtu per hour and fired using natural gas and/or process waste gas and/or process emissions. This unit was installed in 1974 and exhausts to stack S-27-005.
 - (10) One (1) CS Kettle equipped with a 5 MMBtu per hour Born heater, which is fired using natural gas. This unit is located in Plant 47 and was constructed in 1979; and
 - (11) One (1) CS Still equipped with an 8.48 MMBtu per hour Born heater, which is fired using natural gas. This unit is located in Plant 47 and was constructed in 1979.
 - (12) One (1) Born Hot Oil Furnace (Process Heater), identified as HW-925.001, constructed in 1997, with maximum heat input capacity of 9.8 MMBtu/hr, burning natural gas or process residue or process emissions, exhausting to stack S-66-003, located in Plant 66.
 - (13) One (1) Born Hot Oil Furnace (Process Heater), identified as unit 2607T, constructed in 1965, with maximum heat input capacity of 3.6 MMBtu per hour and fired using natural gas only. The unit is located in Plant 38.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6.5-6-31]

- (a) Pursuant to 326 IAC 6.5-6-31 (Particulate Emission Limitations Marion County), the particulate matter emissions from the heaters shall be limited as follows:

Heater	PM Limitation	
	in Tons per year	in lbs per MMBtu
722804	0.2	0.011
BX2707V	0.4	0.011
BXS2706Q	0.1	0.011
BS2740Q	2.0	0.15
BT2728S	2.2	0.15
BM2724W	4.0	0.15
BD2714V	3.1	0.15
EP2729Q	0.1	0.011
732714	2.7	0.011
2607T	Shall burn natural gas only.	

- (b) Pursuant to 326 IAC 6.5-1-2(b)(2) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from heater, HW-925.001 with a maximum heat input of 9.8 MMBtu/hr, located at Plant 66, shall not exceed fifteen hundredth (0.15) pounds per million Btu when burning process residue.
- (c) Pursuant to 326 IAC 6.5-1-2(b)(3) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from heater, HW-925.001 with a maximum heat input of 9.8 MMBtu/hr, located at Plant 66, shall not exceed one hundredth (0.01) grain per dry standard cubic foot (dscf) when burning natural gas.
- (d) Pursuant to 326 IAC 6.5-1-2(b)(3) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from process heater 2607T with a maximum heat input capacity of 3.6 MMBtu per hour, firing only natural gas and located at Plant 38, shall not exceed one hundredth (0.01) grain per dry standard cubic foot (dscf).
- (e) In order for the PM emission limitations in 326 IAC 6.5 not to apply, CS Kettle and CS Still shall burn natural gas only.

D.2.2 Sulfur Dioxide Emission Limitations (SO₂) [326 IAC 7-4]

- (a) Pursuant to 326 IAC 7-4-2 (Marion County Sulfur Dioxide Emission Limitations), emissions of sulfur dioxide from the heaters shall not exceed the emission rates provided in the following table:

Heaters	SO ₂ Emission Limitations	
	lbs per MMBtu	lbs per hour
722804	Less than 0.05	Less than 0.05
BX2707V	1.25	20.0
BXS2706Q	Less than 0.05	Less than 0.05
BS2740Q	1.25	7.5
BT2728S	1.25	7.5
BM2724W	1.25	26.3
BD2714V	1.25	18.8
EP2729Q	1.25	3.8
732714	1.25	45.0
HW-925.001	1.25	2.0
2607 T	Less than 0.05	Less than 0.05
CS Kettle	Less than 0.05	Less than 0.05
CS Still	Less than 0.05	Less than 0.05

- (b) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.3 Visible Emissions Notations

- (a) Visible emission notations of heaters BS2740Q, BT2728S, BM2724W and BD2714V stack exhausts shall be performed once per day during normal daylight operations when burning fuel oil. Visible emission notations of heater HW-925.001 shall be performed once per day during normal daylight hours when burning process residue. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.4 Record Keeping Requirements

- (a) In order to document the compliance status with Condition D.2.3, the Permittee shall maintain a daily record of visible emission notations of process heaters BS2740Q, BT2728S, BM2724W, BD2714V, and HW-925.001 stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emissions notations (e.g. the process did not operate that day).
- (b) Section C – General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (i) Wastewater handling operations, Plant 49, including one (1) Wastewater Treatment Plant, constructed in 1989, having a nominal throughput capacity of 350 gallons of wastewater per minute. The Wastewater Treatment Plant treats wastewater from Plants 27, 38, 40, 41, 47 and 48. Plant sewers are pumped to wastewater storage tanks for processing. Depending on the contents of the wastewater, the wastewater may be pH adjusted, clarified, filtered, and/or steam stripped as needed prior to discharge to the POTW. The Wastewater Treatment Plant consists of one (1) large surge volume tank (identified as the North API), four (4) wastewater storage tanks (identified as tanks 15, 16, 17, and 18), one (1) neutralization tank, one (1) clarification/flocculation tank, one (1) plate and frame filter press, and one (1) steam stripper for press filtrate.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 General Provisions Relating to NESHAPs [326 IAC 20-1][40 CFR 63, Subpart A][326 IAC 14][40 CFR 61, Subpart A]

The provisions of 40 CFR 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14, apply to the waste collection and treatment system except when otherwise specified in 40 CFR 61, Subpart FF.

D.3.2 Standards Required by 40 CFR 61, Subpart FF [326 IAC 14][40 CFR 61.342]

- (a) Pursuant to 40 CFR 61.342(a), the total annual benzene quantity from the facility waste shall not exceed 11 tons per year. Compliance with this limit exempts the Permittee from the requirements of 40 CFR 61.342(b) and (c). The total annual benzene from facility waste is defined as the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream shall be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene.
- (b) Pursuant to 40 CFR 61.342(g), compliance with this subpart will be determined by review of the Permittee's records and results from tests and inspections using methods and procedures specified in D.3.3.

Compliance Determination Requirements

D.3.3 Test Methods, Procedures and Compliance Provisions for 40 CFR 61, Subpart FF [326 IAC 14][40 CFR 61.355]

- (a) Pursuant to 40 CFR 61.355(a), the Permittee shall determine the total annual benzene quantity from facility waste by the following procedure:
- (1) For each waste stream subject to 40 CFR Part 61, Subpart FF having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in Condition D.3.2(a), the Permittee shall:

- (A) Determine the annual waste quantity for each waste stream using the procedures specified in Condition D.3.3(b).
 - (B) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in Condition D.3.3(c).
 - (C) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.
- (2) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to Condition D.3.3(b)(4).
- (3) If the total annual benzene quantity from facility waste is equal to or greater than 11 ton/yr, then the Permittee shall comply with the requirements of 40 CFR 61.342 (c), (d), or (e).
- (4) If the total annual benzene quantity from facility waste is less than 11 tons/yr but is equal to or greater than 1.1 tons/yr, then the Permittee shall:
- (A) Comply with the recordkeeping requirements in Condition D.3.4 and reporting requirements in Condition D.3.5; and
 - (B) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 11 tons/yr or more.
- (5) If the total annual benzene quantity from facility waste is less than 1.1 tons/yr, then the Permittee shall:
- (A) Comply with the recordkeeping requirements in Condition D.3.4 and reporting requirements in Condition D.3.5.
 - (B) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1.1 tons/yr or more.
- (6) The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in Condition D.3.3(b)(2), shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with Condition D.3.3(a) through (c). The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

- (b) Pursuant to 40 CFR 61.355(b) and for purposes of the calculation required by Condition D.3.3(a), the Permittee shall determine the annual waste quantity at the point of waste generation, by one of the following methods:
- (1) Pursuant to 40 CFR 61.355(b)(3), the determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
 - (2) Pursuant to 40 CFR 61.355(b)(4), the determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in Condition D.3.3(a)(1)(C) of this section for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 CFR 61.357(a)(1), the Permittee shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the Permittee chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.
 - (3) Pursuant to 40 CFR 61.355(b)(5), select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation;
 - (4) Pursuant to 40 CFR 61.355(b)(6), use the maximum design capacity of the waste management unit; or
 - (5) Pursuant to 40 CFR 61.355(b)(7), use measurements that are representative of maximum waste generation rates;
- (c) Pursuant to 40 CFR 61.355(c)(1)(i)(C) and for the purposes of the calculation required by Condition D.3.3(a), the Permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in Condition D.3.3(c)(1) using either of the methods given in Condition D.3.3(c)(2) and (3):
- (1) The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:
 - (A) The determination shall be made at the point of waste generation except for the process unit turnaround waste. The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in Condition D.3.3(c)(2) or (3). The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in Condition D.3.3(a)(1)(c) for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.
 - (B) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.
 - (C) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination -- to reduce the benzene concentration.

- (D) The determination shall be made prior to any treatment of the waste that removes benzene, except as specified for process unit turnaround waste in Condition D.3.3(c)(1)(A). The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
 - (E) For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.
- (2) Knowledge of the waste.
The Permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data is used, then the Permittee shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When the Permittee and IDEM, OAQ do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under Condition D.3.3(c)(3) of this section shall be used to resolve the disagreement.
- (3) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:
- (A) The Permittee shall collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.
 - (B) For waste in enclosed pipes, the following procedures shall be used:
 - (i) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.
 - (ii) A static mixer shall be installed in the process line or in a by-pass line unless the Permittee demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.
 - (iii) The sampling tap shall be located within two pipe diameters of the static mixer outlet.
 - (iv) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.
 - (v) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.
 - (vi) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C (50°F).
 - (vii) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

- (viii) The sample containers shall immediately be cooled and maintained at a temperature below 10°C (50°F) for transfer to the laboratory.
- (C) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.
- (D) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:
- (i) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18 of 40 CFR Part 61);
 - (ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18 of 40 CFR Part 61);
 - (iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18 of 40 CFR Part 61);
 - (iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18 of 40 CFR Part 61);
 - (v) Method 602, Purgeable Aromatics, as described in 40 CFR Part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewater for which this is an approved EPA methods; or
 - (vi) Method 624, Purgeables, as described in 40 CFR Part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewater for which this is an approved EPA method.
- (E) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$C = \frac{1}{Q_t} \times \sum_{i=1}^n (Q_i) \times (C_i)$$

Where:

- C = Flow-weighted annual average benzene concentration for waste stream, ppm
Q_t = Total annual waste quantity for waste stream, kg/yr (lb/yr).
n = Number of waste samples (at least 3).
Q_i = Annual waste quantity for waste stream represented by C_i, kg/yr (lb/yr).
C_i = Measured concentration of benzene in waste sample i, ppmw.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.4 Record Keeping Requirements for 40 CFR 61, Subpart FF [325 IAC 14][40 CFR 61.356]

Pursuant to 40 CFR 61.356(b), the Permittee shall maintain the following records:

- (a) Records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart.
- (b) For each waste stream not controlled for benzene emissions, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
- (c) For each waste stream exempt from 40 CFR 61.342(c)(1) in accordance with 40 CFR 61.342(c)(3), the records shall include:
 - (1) All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 40 CFR 61.342(c)(3)(i), or
 - (2) All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 40 CFR 61.342(c)(3)(ii).
- (d) For each facility where process wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.342(d), the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.
- (e) For each facility where waste streams are controlled for benzene emissions in accordance with 40 CFR 61.342(e), the records shall include for each waste stream all measurements, including the locations of the measurements, calculations, and other documentation used to determine that the total benzene quantity does not exceed 6.0 Mg/yr (6.6 ton/yr).
- (f) For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with Condition D.3.3(b)(3), the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with Condition D.3.3(b)(3), the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with Condition D.3.3(a)(1)(C).
- (g) For each facility where wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.348(b)(2), the records shall include all measurements, calculations, and other documentation used to determine the annual benzene content of the waste streams and the total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units.
- (h) Section C – General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.3.5 Reporting Requirements for 40 CFR 61, Subpart FF [326 IAC 14][40 CFR 61.357]

Pursuant to 40 CFR 61.357, the Permittee shall submit the following information to IDEM, OAQ:

- (a) The Permittee shall submit to the Administrator by the initial startup a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in Condition D.3.3(c) to contain benzene. If the Permittee has no benzene onsite in wastes, products, by-products, or intermediates they shall submit an initial report that is a statement to this effect. The report shall include the following information:
 - (1) Total annual benzene quantity from facility waste determined in accordance with Condition D.3.3(a).
 - (2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF.
 - (3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF, the following information shall be added to the table:
 - (A) Whether or not the water content of the waste stream is greater than 10 percent;
 - (B) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
 - (C) Annual waste quantity for the waste stream;
 - (D) Range of benzene concentrations for the waste stream;
 - (E) Annual average flow-weighted benzene concentration for the waste stream; and
 - (F) Annual benzene quantity for the waste stream.
 - (4) The information required in Condition D.3.5(a)(1), (2), and (3) should represent the waste stream characteristics based on current configuration and operating conditions. The Permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a).
- (b) If the total annual benzene quantity from facility waste is less than 1.1 tons/yr, then the Permittee shall submit to IDEM, OAQ a report that updates the information in the initial report (required by Condition D.3.5(a) whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1.1 tons/yr or more.
- (c) If the total annual benzene quantity from facility waste is less than 11 tons/yr but is equal to or greater than 1.1 tons/yr, then the Permittee shall submit to IDEM, OAQ a report that updates the information in the initial report (required by Condition D.3.5(a)). The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 11 tons/yr or more. If the information from that submitted in the previous annual report is not changed in the following year, the Permittee may submit a statement to that effect.

- (d) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 tons/yr), then the Permittee shall submit to IDEM, OAQ the following reports:
- (1) By the date of initial startup, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with 40 CFR 61, Subpart FF. If a waiver of compliance is granted under 40 CFR 61.11, the certification of equipment necessary to comply with these standards shall be submitted by the date the waiver of compliance expires.
 - (2) Beginning on the date that the equipment necessary to comply with these standards has been certified in accordance with Condition D.3.5(d)(1), the Permittee shall submit annually to IDEM, OAQ a report that updates the information listed in Conditions D.3.5(a)(1) through (a)(3). If the information in the annual report required by Conditions D.3.5(a)(1) through (a)(3) is not changed in the following year, the Permittee may submit a statement to that effect.
 - (3) If the Permittee elects to comply with the requirements of 40 CFR 61.342(c)(3)(ii), then the report required by Condition D.3.5(d)(2) shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.
 - (4) If the Permittee elects to comply with the alternative requirements of 40 CFR 61.342(d), then the Permittee shall include in the report required by Condition D.3.5(d)(2) of this section a table presenting the following information for each process wastewater stream:
 - (A) Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of this subpart;
 - (B) For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;
 - (C) For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
 - (5) If the Permittee elects to comply with the alternative requirements of 40 CFR 61.342(e), then the report required by Condition D.3.5(d)(2) shall include a table presenting the following information for each waste stream:
 - (A) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

- (B) For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of this subpart; the table shall report the following information for the waste stream as determined at the applicable location described in 40 CFR 61.355(k)(2): annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
- (6) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with Condition D.3.5(d)(1), the Permittee shall submit quarterly to IDEM, OAQ a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61, Subpart FF.
 - (7) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with Condition D.3.5(d)(1), the Permittee shall submit a report quarterly to the IDEM, OAQ that includes:
 - (A) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1), then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.
 - (B) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(2), then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.
 - (C) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(b), then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr.
 - (D) For a control device monitored in accordance with 40 CFR 61.354(c), records required under 40 CFR 61.357(d)(7)(iv) shall be recorded.
 - (8) Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with Condition 61.357(d)(1), the Permittee shall submit annually to the IDEM, OAQ a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

TANKS SUBJECT TO SUBPART Kb

(j) One (1) storage tank subject to 326 IAC 12; 40 CFR Subpart Kb:

Plant Location	Tank ID	Storage Capacity (gallons)	Constructed On or Before
Plant 29	2969	93,957	1996

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 General Provision Relating to NSPS [326 IAC 12-1][40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Kb.

D.4.2 Standards Required by 40 CFR 60, Subpart Kb [326 IAC 12-1] [40 CFR 60, Subpart 60.112b]

Pursuant to 40 CFR 60.112b(a)(3), storage tank 2969 shall be equipped with a closed vent system and control device meeting the following specifications:

- (a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b), Subpart VV.
- (b) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements 40 CFR 60.18 of the General Provisions.

D.4.3 Compliance Requirements for 40 CFR 60, Subpart Kb [326 IAC 12-1] [40 CFR 60, Subpart 60.116b]

- (a) Pursuant to 40 CFR 60.116b(e), available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - (1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - (2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - (A) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference in 40 CFR 60.17), unless the IDEM, OAQ specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (B) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia (13.8 kPa) or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 0.5 psia (3.5 kPa).
- (3) For other liquids, the vapor pressure:
 - (A) May be obtained from standard reference texts, or
 - (B) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference in 40 CFR 60.17); or
 - (C) Measured by an appropriate method approved by the IDEM, OAQ; or
 - (D) Calculated by an appropriate method approved by the IDEM, OAQ.
- (b) Pursuant to 40 CFR 60.116b(f), the Permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:
 - (1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in Condition D.4.3(a).
 - (2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - (A) ASTM D2879-83, 96, or 97 (incorporated by reference in 40 CFR 60.17); or
 - (B) ASTM D323-82 or 94 (incorporated by reference 40 CFR 60.17); or
 - (C) As measured by an appropriate method as approved by the IDEM, OAQ.

Compliance Determination Requirements

D.4.4 Testing Methods and Procedures Required by 40 CFR 60, Subpart Kb [326 IAC 12-1] [40 CFR 60, Subpart 60.113b]

Pursuant to 40 CFR 60.113b(d), the Permittee shall comply with the following requirements for storage tank 2969:

The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 40 CFR 60.112b (a)(3) or (b)(2), shall meet the requirements as specified in the general control device requirements, 40 CFR 60.18 (e) and (f).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.5 Reporting and Record Keeping Required by 40 CFR 60, Subpart Kb [326 IAC 12-1]
[40 CFR 60, Subpart 60.115b and 60.116b]

- (a) Pursuant to 40 CFR 60.115b(d), the Permittee shall maintain copies of the following records and reports for storage tank 2969:
 - (1) A report containing the measurements required by 40 CFR 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.
 - (2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.
 - (3) Semiannual reports of all periods recorded under 40 CFR 60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.
- (b) Pursuant to 40 CFR 60.116b(b), the Permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for all storage tanks listed in this section. These records shall be kept for the life of the storage tank.
- (c) Pursuant to 40 CFR 60.116b(c), the Permittee shall maintain records of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period for storage tank 2969, which has a design capacity greater than 39,890 gallons (151 m³) storing a liquid with a maximum true vapor pressure greater than or equal to 0.5 psia (3.5 kPa).

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Benzene Tanks

- (q) One (1) storage tank identified as 254, located at Plant 27, having a maximum storage capacity of 19,858 gallons and used to store benzene. This storage tank was constructed in 1990 and is equipped with an internal floating roof.
- (r) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 27:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 27	212	6,169	Prior to 1980

- (s) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 41:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 41	211	6,169	Prior to 1980
	213	6,169	1980, replaced in 2006
	236	6,169	1980

- (t) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 40

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 40	304	6,169	1963

- (v) The following storage tanks with storage capacities less than 10,000 gallons are to be used to store benzene:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 27	234	7,638	Prior to 1980
	233	7,638	Prior to 1980

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 General Provisions Relating to NESHAP [326 IAC 14-1][40 CFR Part 61, Subpart A]

The provisions of 40 CFR 61, Subpart A - General Provisions, which are incorporated by reference in 326 14-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 61, Subpart Y – National Emission Standard for Benzene Storage Vessels.

D.5.2 Emission Standard for 40 CFR 61, Subpart Y [326 IAC 14][40 CFR 63, Subpart G][326 IAC 20-12]

Pursuant to 40 CFR 61.271(a), storage vessel 254 shall be equipped with a fixed roof and an internal floating roof.

- (a) An internal floating roof means a cover that rests on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a permanently affixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- (b) The internal floating roof shall be equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
- (c) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.
- (d) Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- (e) Each internal floating roof shall meet the specifications listed below.
 - (1) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.
 - (2) Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
 - (3) Each automatic bleeder vent shall be gasketed.
 - (4) Rim space vents shall be equipped with a gasket.
 - (5) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
 - (6) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
 - (7) Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

D.5.3 Compliance Provisions for 40 CFR 61, Subpart Y [326 IAC 14][40 CFR 63, Subpart G][326 IAC 20-12]

Pursuant to 40 CFR 61.272, the Permittee shall comply with the following requirements for storage vessel 254:

- (a) Visually inspect the internal floating roof and the primary seal or the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months, except as provided in Condition D.5.3(c)(1). If the internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the Permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the IDEM, OAQ in the inspection report required in Condition D.5.5(a). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the Permittee will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- (b) Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in Condition D.5.3(a) and at intervals greater than 5 years in the case of vessels specified in Condition D.5.3(c)(1).
 - (1) For all the inspections required by Condition D.5.3(b), the Permittee shall notify the IDEM, OAQ in writing at least 30 days prior to the refilling of each storage vessel to afford IDEM, OAQ the opportunity to have an observer present. If the inspection required by Condition D.5.3(b) is not planned and the Permittee could not have known about the inspection 30 days in advance of refilling the vessel, the Permittee shall notify the IDEM, OAQ at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent by express mail so that it is received by the IDEM, OAQ at least 7 days prior to refilling.
 - (2) If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the Permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with benzene.
- (c) For vessels equipped with a double-seal system as specified in Condition D.5.3(b):
 - (1) Visually inspect the vessel as specified in Condition D.5.3(b) at least every 5 years; or
 - (2) Visually inspect the vessel annually as specified in Condition D.5.3(a), and at least every 10 years as specified in Condition D.5.3(b).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 Record Keeping Requirements [40 CFR 61, Subpart Y][326 IAC 14][40 CFR 63, Subpart G] [326 IAC 20-12]

Pursuant to 40 CFR 61.276(b), the Permittee shall keep readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel for all storage vessels listed in this section. These records shall be kept as long as the storage vessel is in operation. Storage vessels listed in this section which have a design capacity of less than 38 cubic meters (10,000 gallons) are subject to no provisions of 40 CFR 61, Subpart Y other than the requirements specified in this condition.

D.5.5 Reporting Requirements [40 CFR 61, Subpart Y][326 IAC 14][40 CFR 63, Subpart G] [326 IAC 20-12]

Pursuant to 40 CFR 61.275(a), the Permittee shall comply with the following reporting requirements for storage tank 254:

- (a) The Permittee shall submit a report describing the results of each inspection conducted in accordance with Condition D.5.3(b). For vessels for which annual inspections are required under Condition D.5.3(b), the report shall be submitted no more than 12 months after the last report was submitted, and each report is to be submitted within 60 days of each annual inspection.
 - (1) Each report shall include the date of the inspection of the storage vessel and state whether the following conditions exist:
 - (A) The internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached from the internal floating roof, or there are holes, tears or other openings in the seal or seal fabric; or
 - (B) There are visible gaps between the seal and the wall of the storage vessel.
 - (2) Where an annual report identifies any condition in Condition D.5.5(a)(1) the annual report shall describe the nature of the defect, the date the storage vessel was emptied, and the nature and date a repair was made, except as provided in Condition D.5.5(a)(3).
 - (3) If an extension is requested in an annual periodic report in accordance with Condition D.5.3(b), a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the storage vessel was emptied and the nature of and date the repair was made.
- (b) The Permittee shall submit a report describing the results of each inspection conducted in accordance with Condition D.5.3(b) or (c).
 - (1) The report is to be submitted within 60 days of conducting each inspection required by Condition D.5.3(b) or (c).
 - (2) Each report shall identify each storage vessel in which the owner or operator finds that the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area. The report shall also describe the nature of the defect, the date the storage vessel was emptied, and the nature of and date the repair was made.

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 27

- (j) Plant 27 used to manufacture pyridine and picolines. The plant was initially constructed in 1961 and consists of reactors, a product recovery unit, distillation columns, and four (4) cooling towers. A catalyst regenerator (identified as unit BX27REG) is also located in this plant. The catalyst regenerator, constructed in 1961, has emissions of particulate matter that are controlled using an external cyclone (with same ID as the regenerator), which exhausts to stack S-27-006. A molecular sieves regenerator, constructed in 1990, with VOC emissions controlled by a scrubber, is also located at this plant.
- (r) The following storage tanks with storage capacities less than 10,000 gallons which may be used to store benzene, located at Plant 27:

Tank Location	Tank ID	Storage Capacity (gallons)	Year Installed
Plant 27	212	6,169	Prior to 1980
	233	7,638	Prior 1980

- (u) Three (3) storage tanks (identified as 200, 201, and 202) located at Plant 27, each with a storage capacity of 51,500 gallons, and used to store formaldehyde. These tanks were constructed in 1989.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 General Provision Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subparts F, G, and H.

D.6.2 General Standards [40 CFR 63, Subpart G][326 IAC 20-16-1]

Pursuant to 40 CFR 63.102(a), the Permittee of sources subject to 40 CFR Part 63, Subpart F shall comply with the requirements of 40 CFR Part 63, Subparts G and H.

- (a) The provisions set forth in 40 CFR Part 63, Subpart F and Subpart G shall apply at all times except during periods of start-up or shutdown (as defined in 40 CFR 63.101), malfunction, or non-operation of the chemical manufacturing process unit (or specific portion thereof) resulting in cessation of the emissions to which 40 CFR Part 63, Subpart F and Subpart G apply. However, if a start-up, shutdown, malfunction or period of nonoperation of one portion of a chemical manufacturing process unit does not affect the ability of a particular emission point to comply with the specific provisions to which it is subject, then that emission point shall still be required to comply with the applicable provisions of 40 CFR Part 63, Subpart F and Subpart G during the start-up, shutdown, malfunction or period of non-operation.

- (b) The provisions set forth in 40 CFR Part 63, Subpart H shall apply at all times except during periods of start-up or shutdown, as defined in 40 CFR 63.101(b), malfunction, process unit shutdown (as defined in 40 CFR 63.161), or non-operation of the chemical manufacturing process unit (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which 40 CFR Part 63, Subpart H applies.
- (c) The Permittee shall not shut down items of equipment that are required or utilized for compliance with the provisions of 40 CFR Part 63, Subpart F or Subpart G or H during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment, if the shutdown would contravene requirements of 40 CFR Part 63, Subpart F or Subpart G or H applicable to such items of equipment. This condition does not apply if the item of equipment is malfunctioning, or if the Permittee must shut down the equipment to avoid damage due to a contemporaneous start-up, shutdown, or malfunction of the chemical manufacturing process unit or portion thereof.
- (d) During start-ups, shutdowns, and malfunctions when the requirements of 40 CFR Part 63, Subpart F, Subparts G and/or H do not apply pursuant to Conditions D.6.2(a) through (c), the Permittee shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. The term "excess emissions" means emissions in excess of those that would have occurred if there were no start-up, shutdown, or malfunction and the Permittee complied with the relevant provisions of 40 CFR Part 63, Subpart F and/or Subparts G and/or H. The measures to be taken shall be identified in the applicable start-up, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the source. Back-up control devices are not required, but may be used if available.
- (d) The Permittee shall use a fuel gas system for compliance; therefore, there are no process vents subject to 40 CFR 63, Subpart G.

D.6.3 Requirements for Heat Exchange Systems [326 IAC 20][40 CFR 63, Subpart F]

- (a) Pursuant to 40 CFR 63.104, except when one or more of the conditions specified in 40 CFR 63.104(a)(1) through (a)(6) are met, the Permittee shall monitor each heat exchange system subject to 40 CFR 63.104 according to the provisions in either Condition D.6.3(b) or (c). Whenever a leak is detected, the Permittee shall comply with the requirements in Condition D.6.3(d).
- (b) If the Permittee elects to comply with the requirements of Condition D.6.3(a) by monitoring the cooling water for the presence of one or more organic hazardous air pollutants or other representative substances whose presence in cooling water indicates a leak, then the Permittee shall comply with the requirements of 40 CFR 63.104(b)(1) through (b)(6). The cooling water shall be monitored for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system.
- (c) If the Permittee elects to comply with the requirement of Condition D.6.3(a) monitoring using a surrogate indicator of heat exchange system leaks, the Permittee shall comply with the requirements specified in 40 CFR 63.104(c)(1) through (c)(3). Surrogate indicators that could be used to develop an acceptable monitoring program are ion specific electrode monitoring, pH, conductivity or other representative indicators.

- (d) If a leak is detected according to Conditions D.6.3(b) or (c), the Permittee shall comply with the following requirements, except as provided in Condition D.6.3(e).
 - (1) The leak shall be repaired as soon as practical but not later than 45 calendar days after the owner or operator receives results of monitoring tests indicating a leak. The leak shall be repaired unless the owner or operator demonstrates that the results are due to a condition other than a leak.
 - (2) Once the leak has been repaired, the owner or operator shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later.
- (e) Delay of repair of heat exchange systems for which leaks have been detected is allowed if the equipment is isolated from the process. Delay of repair is also allowed if repair is technically infeasible without a shutdown and any one of the conditions in 40 CFR 63.104(e)(1) or (e)(2) is met. All time periods in conditions pursuant to 40 CFR 63.104(e)(1) and (e)(2) shall be determined from the date when the Permittee determines that delay of repair is necessary.

D.6.4 Storage Vessel Provisions [326 IAC 20][40 CFR 63, Subpart G]

Pursuant to 40 CFR 63.119(a)(5), storage tanks 200, 201, and 202, which meet the definition of Group 2 storage vessels as defined in 40 CFR 63.111, are subject to the recordkeeping requirements in Condition D.6.29, but are not subject to any other provisions of 40 CFR 63, Subpart G. If any change causes a storage tank to meet the definition of a Group 1 storage vessel, the Permittee shall comply with all requirements of 40 CFR 63, Subpart G applicable to Group 1 storage tanks.

D.6.5 Process Wastewater Provisions [326 IAC 20][40 CFR 63, Subpart G]

- (a) The Group 2 wastewater streams (identified as ammonia stripper bottoms and raffinate stripper bottoms) shall comply only with the recordkeeping requirements in 40 CFR 63.147(b)(8).
- (b) If at any time the statements in Condition D.6.5(b)(1) or (2) exist for any wastewater stream located at Plant 27, the Permittee shall comply with the standards, monitoring, recordkeeping and reporting requirements for Group 1 wastewater streams found in 40 CFR 63, Subpart G.
 - (1) The total annual average concentration of compounds listed in Table 9 of 40 CFR Part 63, Subpart G is greater than or equal to 10,000 parts per million by weight at any flow rate; or
 - (2) The total annual average concentration of compounds listed in Table 9 of 40 CFR Part 63, Subpart G is greater than or equal to 1,000 parts per million by weight and the annual average flow rate is greater than or equal to 10 liters per minute.
- (c) The Permittee shall determine whether a wastewater stream is a Group 1 or Group 2 waste stream in accordance with the provisions in 40 CFR 63.132(c). Total annual average concentration of compounds listed in Table 9 of 40 CFR 63, Subpart G shall be determined according to the procedures specified in 40 CFR 63.144(b). The annual average flow rate shall be determined according to the procedures specified in 40 CFR 63.144(c).
- (d) Pursuant to 40 CFR 63.132(f), the Permittee shall not discard liquid or solid organic materials with a concentration of greater than 10,000 parts per million of compounds listed in Table 9 of 40 CFR Part 63, Subpart G (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from the following activities:

- (1) Equipment leaks;
- (2) Activities included in maintenance or startup/shutdown/malfunction plans;
- (3) Spills; or
- (4) Samples of a size not greater than reasonably necessary for the method of analysis that is used.

D.6.6 Standards: Pumps in Light Liquid Service [326 IAC 14] [40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.163(b)(1), the Permittee shall monitor each pump monthly to detect leaks by the method specified in Condition D.6.20(a) and shall comply with the following requirements, except as provided in 40 CFR 63.162(b) and Condition D.6.6(d).
 - (1) A leak is defined as an instrument reading of 1,000 parts per million or greater.
 - (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.
- (b) (1) Pursuant to 40 CFR 63.163(c)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition D.6.6(b)(3) or D.6.12.
 - (2) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:
 - (i) Tightening of packing gland nuts.
 - (ii) Ensuring that the seal flush is operating at design pressure and temperature.
 - (3) Repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.
- (c) (1) Pursuant to 40 CFR 63.163(d)(1), the Permittee shall calculate percent leaking pumps on a process unit basis.
 - (2) If calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the Permittee shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.175.
 - (3) The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.
 - (4) Percent leaking pumps shall be determined by the following equation:
$$\%PL = ((PL - PS) / (PT - PS)) \times 100$$

where:
%PL = Percent leaking pumps

PL = Number of pumps found leaking as determined through monthly monitoring as required in Condition D.6.6(a)(1).

PT = Total pumps in organic HAP service, including those meeting the criteria in 40 CFR 63.163(e) and 63.163(f).

PS = Number of pumps leaking within 1 month of start-up during the current monitoring period.

- (d) Pursuant to 40 CFR 63.163(j), any pump that is designated as an unsafe-to-monitor pump is exempt from the requirements of Condition D.6.6(a) if:
- (1) The Permittee determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with this condition; and
 - (2) The Permittee has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.
- (e) Pursuant to 40 CFR 63.163(e), each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Conditions D.6.6(a), (b) and (c), provided the following requirements are met:
- (1) Each dual mechanical seal system is:
 - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
 - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or
 - (iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream.
 - (2) The barrier fluid is not in light liquid service.
 - (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
 - (4) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - (i) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid.
 - (ii) If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected.
 - (5) Each sensor as described in Condition 6.6(e)(3) is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.
 - (6)
 - (i) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.

- (ii) If indications of liquids dripping from the pump seal exceed the criteria established in Condition D.6.6(e)(6)(i), or if, based on the criteria established in Condition D.6.6(e)(6)(i), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
 - (iii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.
 - (iv) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (f) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of Conditions D.6.6(a) and (b).

D.6.7 Standards: Pressure Relief Devices In Gas / Vapor Service [326 IAC 14][40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.165(a), except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 parts per million above background except as provided in Condition D.6.7(b), as measured by the method specified in Condition D.6.20.
- (b)
 - (1) Pursuant to 40 CFR 63.165(b)(1), after each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition D.6.12.
 - (2) No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in Condition D.6.20.
- (c) Pursuant to 40 CFR 63.165(c), any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Condition D.6.13 is exempt from the requirements of this condition.
- (d)
 - (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Conditions D.6.7(a) and (b), provided the owner or operator complies with the requirements in Condition D.6.7(d)(2).
 - (2) After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171 of this subpart.

D.6.8 Standards: Open-ended Valves or Lines [326 IAC 14][40 CFR 63, Subpart H]

- (a) Pursuant to 40 CFR 63.167(a)(1), each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and 63.167(e). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

D.6.9 Standards: Valves In Gas / Vapor Service and In Light Liquid Service [326 IAC 14]
[40 CFR 63 Subpart H]

Pursuant to 40 CFR 63.168, valves that are either in gas service or in light liquid service shall comply with the following provisions:

- (a) Pursuant to 40 CFR 63.168(b), the Permittee shall monitor all valves, except as provided in Condition D.6.12 and Conditions D.6.9(f) and D.6.9(g), at the intervals specified in Condition D.6.9(b).
- (1) The valves shall be monitored to detect leaks by the method specified in Condition D.6.20.
- (2) A leak is defined as an instrument reading of 500 parts per million or greater.
- (b) Pursuant to 40 CFR 63.168(d), the Permittee shall monitor valves for leaks at the intervals specified below:
- (1) At process units with 2 percent or greater leaking valves, calculated according to Condition D.6.9(c), the Permittee shall either:
- (i) Monitor each valve once per month; or
- (ii) Implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175(d) or (e) and monitor quarterly.
- (2) At process units with less than 2 percent leaking valves, the Permittee shall monitor each valve once each quarter, except as provided in Conditions D.6.9(b)(3) and D.6.9(b)(4).
- (3) At process units with less than 1 percent leaking valves, the Permittee may elect to monitor each valve once every 2 quarters.
- (4) At process units with less than 0.5 percent leaking valves, the Permittee may elect to monitor each valve once every 4 quarters.
- (c) Pursuant to 40 CFR 63.168(e)(1), the percent leaking valves at a process unit shall be determined by the following equation:

$$\%VL = (VL / (VT+VC)) \times 100$$

where:

%VL = Percent leaking valves as determined through periodic monitoring required in Conditions D.6.9(a) through (b).

VL = Number of valves found leaking excluding non-repairables as provided in paragraph (c)(2)(i).

VT = Total valves monitored, in a monitoring period excluding valves monitored as required by paragraph (d)(3).

VC = Optional credit for removed valves = $0.67 \times$ net number (i.e., total removed-total added) of valves in organic HAP service removed from process unit after the date set forth in 40 CFR 63.100(k) of Subpart F for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then VC = 0.

- (1) For use in determining monitoring frequency, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs.
- (2)
 - (i) Non-repairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with Condition D.6.9(c)(2)(ii). Otherwise, a number of non-repairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.
 - (ii) If the number of non-repairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of non-repairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.
- (d)
 - (1) Pursuant to 40 CFR 63.168(f)(1), when a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition D.6.12.
 - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (3) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.
 - (i) The monitoring shall be conducted as specified in Conditions D.6.20, as appropriate and as allowed by the rule, to determine whether the valve has resumed leaking.
 - (ii) Periodic monitoring required by Condition D.6.9(a) and (b) may be used to satisfy the requirements of this condition, if the timing of the monitoring period coincides with the time specified in this condition. Alternatively, other monitoring may be performed to satisfy the requirements of this condition, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the specified time.
 - (iii) If a leak is detected, the Permittee shall follow the provisions of the following paragraphs, Conditions D.6.9(d)(3)(iii)(A) and D.6.9(d)(3)(iii)(B), to determine whether that valve must be counted as a leaking valve.
 - (A) If the Permittee elected to use periodic monitoring required by Conditions D.6.9(a) and (b) to satisfy the requirements of Condition D.6.9(d)(3), then the valve shall be counted as a leaking valve.
 - (B) If the Permittee elected to use other monitoring, prior to the periodic monitoring required by Conditions D.6.9(a) and (b) to satisfy the requirements of Condition D.6.9(d)(3), then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

- (e) Pursuant to 40 CFR 63.168(g), first attempts at repair include, but are not limited to, the following practices where practicable:
 - (1) Tightening of bonnet bolts,
 - (2) Replacement of bonnet bolts,
 - (3) Tightening of packing gland nuts, and
 - (4) Injection of lubricant into lubricated packing.
- (f) Pursuant to 40 CFR 63.168(h), any valve that is designated as an unsafe-to-monitor valve is exempt from the requirements of this condition if:
 - (1) The Permittee determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with this condition; and
 - (2) The Permittee has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.
- (g) Pursuant to 40 CFR 63.168(i), any valve that is designated as a difficult-to-monitor valve is exempt from the requirements of this condition if:
 - (1) The Permittee determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner; and
 - (2) The Permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

D.6.10 Standards: Pumps, Valves, and Connectors in Heavy Liquid Service; Instrumentation Systems; and Pressure Relief Devices in Liquid Service [326 IAC 14] [40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.169(a), pumps, valves, and connectors in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in Condition D.6.20(a) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in Conditions D.6.10(c) and (d), it is not necessary to monitor the system for leaks by the method specified in Condition D.6.20(a).
- (b) Pursuant to 40 CFR 63.169(b), if an instrument reading of 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected.
- (c)
 - (1) Pursuant to 40 CFR 63.169(c)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition D.6.12.
 - (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (3) For equipment identified in Condition D.6.10(a) that is not monitored by the method specified in Condition D.6.20(a), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

- (d) Pursuant to 40 CFR 63.169(d), first attempts at repair include, but are not limited to, the practices described under Conditions D.6.6(b)(2) and D.6.9(e), for pumps and valves, respectively.

D.6.11 Standards: Surge Control Vessels and Bottoms Receivers [326 IAC 14] [40 CFR 63 Subpart H]

Pursuant to 40 CFR 63.170, each surge control vessel or bottoms receiver that meets the conditions in Table 2 or Table 3 of 40 CFR 63.170 shall be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or 63.119(c) of 40 CFR 63, Subpart G.

D.6.12 Standards: Delay of Repair [326 IAC 14] [40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.171(a), delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown.
- (b) Pursuant to 40 CFR 63.171(b), delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.
- (c) Pursuant to 40 CFR 63.171(c), delay of repair for valves, and connectors is also allowed if:
 - (1) The Permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and
 - (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Condition D.6.13.
- (d) Pursuant to 40 CFR 63.171(d), delay of repair for pumps is also allowed if:
 - (1) Repair requires replacing the existing seal design with a new system that the Permittee has determined under the provisions of 40 CFR 63.176(d) will provide better performance.
 - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Pursuant to 40 CFR 63.171(e), delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

D.6.13 Standards: Closed-Vent Systems and Control Devices [326 IAC 14] [40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.172(a), closed-vent systems and control devices used to comply with provisions of 40 CFR Part 63, Subpart H shall comply with the provisions of this condition, except as provided in 40 CFR 63.162(b).
- (b) Pursuant to 40 CFR 63.172(b), recovery or recapture devices (e.g., condensers and absorbers) shall be designed and operated to recover the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

- (c) Pursuant to 40 CFR 63.172(c), the Permittee shall monitor control devices to ensure that they are operated and maintained in conformance with their design to ensure proper operation and maintenance of the control device.
- (d) Pursuant to 40 CFR 63.172(f), except as provided in Conditions D.6.13(i) and (j), each closed-vent system shall be inspected according to the procedures and schedule specified below.
 - (1) If the closed-vent system is constructed of hard-piping, the Permittee shall:
 - (i) Conduct an initial inspection according to the procedures Condition D.6.13(e), and
 - (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
 - (2) If the vapor collection system or closed-vent system is constructed of ductwork, the Permittee shall:
 - (i) Conduct an initial inspection according to the procedures in Condition D.6.13(e), and
 - (ii) Conduct annual inspections according to the procedures Condition D.6.13(e).
- (e) Pursuant to 40 CFR 63.172(g), each closed-vent system shall be inspected according to the procedures in Condition D.6.20(a).
- (f) Pursuant to 40 CFR 63.172(h), leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in Condition D.6.13(g).
 - (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - (2) Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in Condition D.6.13(g).
- (g) Pursuant to 40 CFR 63.172(i), delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the Permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- (h) Pursuant to 40 CFR 63.172(j), for each closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the Permittee shall comply with the provisions of either Condition D.6.13(h)(1) or (h)(2), except as provided in Condition D.6.13(h)(3).
 - (1) Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line; or
 - (2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

- (3) Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to Conditions D.6.13(h)(1) and (h)(2).
- (i) Pursuant to 40 CFR 63.172(k), any parts of the closed-vent system that are designated as unsafe to inspect are exempt from the inspection requirements of Conditions D.6.13(d)(1) and (d)(2) if:
 - (1) The Permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Conditions D.6.13(d)(1) and (d)(2); and
 - (2) The Permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually.
- (j) Pursuant to 40 CFR 63.172(l), any parts of the closed-vent system that are designated as difficult to inspect are exempt from the inspection requirements of Conditions D.6.13(d)(1) and (d)(2) if:
 - (1) The Permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
 - (2) The Permittee has a written plan that requires inspection of the equipment at least once every 5 years.
- (k) Pursuant to 40 CFR 63.172(m), whenever organic HAP emissions are vented to a closed vent system or control device used to comply with the provisions 40 CFR Part 63, Subpart H, such system or control device shall be operating.
- (l) Pursuant to 40 CFR 63.173(a), each agitator shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.180(b), except as provided in 40 CFR 63.162(b). If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.
- (m) Pursuant to 40 CFR 63.173(b), each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected.
- (n) Pursuant to 40 CFR 63.173(c), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (o) Pursuant to 40 CFR 63.173(d), each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Condition D.6.13(l), provided the requirements specified below are met:
 - (1) Each dual mechanical seal system is:
 - (i) Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or
 - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or
 - (iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream.

- (2) The barrier fluid is not in light liquid organic HAP service.
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (4) Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal.
 - (i) If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid.
 - (ii) If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.
- (5) Each sensor as described in Condition D.6.13(o)(3) is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site.
- (6)
 - (i) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
 - (ii) If indications of liquids dripping from the agitator seal exceed the criteria established in Condition D.6.13(o)(6)(i) of this section, or if, based on the criteria established in paragraph Condition D.6.13(o)(6)(i), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
 - (iii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.
 - (iv) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

D.6.14 Standards: Connectors In Gas / Vapor Service and In Light Liquid Service [326 IAC 14]
[40 CFR 63 Subpart H]

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- (a) Pursuant to 40 CFR 63.174(a), the Permittee of a process unit subject to 40 CFR Part 63, Subpart H shall monitor all connectors in gas/vapor and light liquid service, except as provided in 40 CFR 63.162(b), and in Conditions D.6.14(e) and D. 6.14(g), at the intervals specified in Condition D. 6.14(b).
 - (1) The connectors shall be monitored to detect leaks by the method specified in Condition D.6.20(a).
 - (2) If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.
 - (b) Pursuant to 40 CFR 63.174(b), the Permittee shall monitor for leaks at the intervals specified in below:
 - (1) The Permittee shall monitor all connectors, except as provided in Conditions D. 6.14(e) and (g).

- (2) The Permittee shall perform monitoring of connectors at the frequencies specified in Conditions D. 6.14(b)(2)(i) through (b)(2)(v), except as provided in Condition D.6.14(c)(2):
- (i) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period.
 - (ii) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. The Permittee may comply with this condition by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.
 - (iii) If the Permittee of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the Permittee may monitor the connectors one time every 4 years. The Permittee may comply with these requirements by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.
 - (iv) If a process unit complying with the requirements of Condition D.6.14(b) using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the Permittee shall increase the monitoring frequency to one time every 2 years. The Permittee may comply with the requirements of this condition by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The Permittee may elect to use the provisions of Condition D.6.14(b)(2)(iii) when the percent leaking connectors decreases to less than 0.5 percent.
 - (v) If a process unit complying with requirements of Condition D.6.14(b)(2)(iii) using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the Permittee shall increase the monitoring frequency to one time per year. The Permittee may elect to use the provisions of Condition D.6.14(b)(2)(iii) when the percent leaking connectors decreases to less than 0.5 percent.
- (c) (1) (i) Pursuant to 40 CFR 63.174(c)(1)(i), except as provided in Condition D.6.14(c)(1)(ii), each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic hazardous air pollutants service. If the monitoring detects a leak, it shall be repaired according to the provisions of Condition D.6.14(d), unless it is determined to be non-repairable, in which case it is counted as a nonrepairable connector for the purposes of Condition D.6.14(h).
- (ii) As an alternative to the requirements in Condition D.6.14(c)(1)(i), the Permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the Permittee may not count non-repairable connectors for the purposes of Condition D.6.14(h)(2). The Permittee shall calculate the percent leaking connectors for the monitoring periods described in Condition D.6.14(b), by setting the non-repairable component, CAN, in the equation in Condition D.6.14(h) to zero for all monitoring periods.

- (iii) The Permittee may switch alternatives described in Conditions D.6.14(c)(1)(i) and (c)(1)(ii) at the end of the current monitoring period, provided that it is reported as required in Condition D.6.28 and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch.
- (2) As an alternative to the requirements of Condition D.6.14(b)(2) of this condition, each screwed connector 2 inches or less in nominal inside diameter may:
 - (i) Comply with the requirements of Condition D.6.10; and
 - (ii) Be monitored for leaks within the first 3 months after being returned to organic hazardous air pollutants service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of Condition D.6.14(d).
- (d) Pursuant to 40 CFR 63.174(d), when a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition D.6.14(f) and in Condition D.6.12. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
- (e) Pursuant to 40 CFR 63.174(f), any connector that is designated as an unsafe-to-monitor connector is exempt from the requirements of Condition D.6.14(a) if:
 - (1) The Permittee determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with Conditions D.6.14(a) through (d); and
 - (2) The Permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable.
- (f) Pursuant to 40 CFR 63.174(g), any connector that is designated as an unsafe-to-repair connector is exempt from the requirements of Conditions D.6.14(a) and (d) if:
 - (1) The Permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with Condition D.6.14(d); and
 - (2) The connector will be repaired before the end of the next scheduled process unit shutdown.
- (g) (1) Pursuant to 40 CFR 63.174(h)(1), any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of Conditions D.6.14(a) and (c) and from the recordkeeping and reporting requirements of Conditions D.6.27 and D.6.28. An inaccessible connector is one that is:
 - (i) Buried;
 - (ii) Insulated in a manner that prevents access to the connector by a monitor probe;
 - (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;
 - (iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground;

- (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or
 - (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.
- (2) If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition D.6.12 and D.6.14(f).
- (3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
- (h) Pursuant to 40 CFR 63.174(i), for use in determining the monitoring frequency, as specified in Condition D.6.14(b), the percent leaking connectors shall be calculated as specified below:
- $$\% CL = [(CL - CAN) / (Ct + CC)] \times 100$$
- where:
- % CL = Percent leaking connectors as determined through periodic monitoring required in Conditions D.6.14(a) and D.6.14(b).
- CL = Number of connectors, including non-repairables, measured at 500 parts per million or greater, by the method specified in Condition D.6.20(a).
- CAN = Number of allowable non-repairable connectors, as determined by monitoring required in Conditions D.6.14(b) and D.6.14(c), not to exceed 2 percent of the total connector population, Ct.
- Ct = Total number of monitored connectors, including non-repairables, in the process unit.
- CC = Optional credit for removed connectors = $0.67 \times$ net number (i.e., total removed—total added) of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable subpart for existing process units, and after the date of initial start-up for new process units. If credits are not taken, then CC = 0.
- (i) Pursuant to 40 CFR 63.174(j), if the Permittee eliminates a connector subject to monitoring under Condition D.6.14(b), the Permittee may receive credit for elimination of the connector, as described in Condition D.6.14(h), provided the following requirements are met.
- (1) The integrity of the weld is demonstrated by monitoring it according to the procedures in Condition D.6.20(a) or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.
 - (2) Welds are monitored or tested within 3 months after being welded.

- (3) If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of 40 CFR Part 63, Subpart H.

D.6.15 Requirements for Maintenance of Wastewater [326 IAC 20][40 CFR 63, Subpart F]

Pursuant to 40 CFR 63.105, the Permittee shall comply with the requirements of Conditions D.6.15(a) through (d) for maintenance wastewater containing the organic HAP's listed in Table 9 of 40 CFR 63, Subpart G.

- (a) The Permittee shall prepare a description of maintenance procedures for management of wastewater generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall:
 - (1) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.
 - (2) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and
 - (3) Specify the procedures to be followed when clearing materials from process equipment.
- (b) The Permittee shall modify and update the information required by Condition D.6.15(a) as needed following each maintenance procedure based on the actions taken and the wastewater generated in the preceding maintenance procedure.
- (c) The Permittee shall implement the procedures described in Conditions D.6.15(a) and (b) as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).
- (d) The Permittee shall maintain a record of the information required by Conditions D.6.15(a) and (b) as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).

D.6.16 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Emission Limitations), the particulate matter emissions from the Catalyst Regenerator shall be limited to 0.03 grains per dry standard cubic foot.

Compliance Determination Requirements

D.6.17 Particulate Control

In order to ensure compliance with Condition D.6.16, the cyclone used for particulate control shall be in operation and control emissions at all times while the Catalyst Regenerator is in operation.

D.6.18 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days after re-starting operation of the molecular sieves, the Permittee shall perform VOC testing on the molecular sieves regenerator, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.6.19 Test Methods and Procedures Equipment Leaks [326 IAC 14][40 CFR 63 Subpart H]

Pursuant 40 CFR 63.180(a), the Permittee shall comply with the following test methods and procedures:

- (a) All monitoring shall be performed in accordance with the requirements in 40 CFR 63.180(b).
- (b) Pursuant 40 CFR 63.180(c), when equipment is monitored for compliance as required in 40 CFR 63.164(i), Conditions D.6.7(a), and D.6.13(d) or when equipment subject to a leak definition of 500 ppm is monitored for leaks, the Permittee may elect to adjust or not to adjust the instrument readings for background. If the Permittee elects to not adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the Permittee elects to adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(c)(1) through (c)(4).
- (c) Pursuant 40 CFR 63.180(d)(1), each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the Permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR Part 60, Appendix A shall be used.
- (d) The Permittee may use good engineering judgment rather than the procedures in Condition D.6.19(c) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the Permittee and IDEM, OAQ do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (c) shall be used to resolve the disagreement. Conversely, the Permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.
- (e) If the Permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in Condition D.6.19(c), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
- (f) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.6.20 Visible Emissions Notations

- (a) Visible emission notations of the Catalyst Regenerator stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.6.21 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.22 Record Keeping Requirements

- (a) In order to document the compliance status with Condition D.6.20, the Permittee shall maintain a daily record of visible emission notations of the Catalyst Regenerator stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) Section C – General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.6.23 General Compliance, Reporting, and Record Keeping provisions [40 CFR 63, Subpart G] [326 IAC 20-16-1]

- (a) The Permittee shall keep records of the following:
 - (1) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or of air pollution control equipment or continuous monitoring systems used to comply with 40 CFR Part 63, Subpart F, Subpart G, or H during which excess emissions (as defined in Condition D.6.2(d)) occur.
 - (2) For each start-up, shutdown, and malfunction during which excess emissions (as defined in Condition D.6.2(d)) occur, records that the procedures specified in the source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a control device to a backup control device (e.g., the incinerator for a halogenated stream could be routed to a flare during periods when the primary control device is out of service), records must be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event.
 - (3) For continuous monitoring systems used to comply with 40 CFR Part 63, Subpart G, records documenting the completion of calibration checks and maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.
- (b) Pursuant to 40 CFR 63.103(d), all reports required under 40 CFR Part 63, Subparts F, G, and H shall be sent to IDEM, OAQ and US EPA at the addresses listed in 40 CFR 63.13 of Subpart A.

D.6.24 Process Wastewater Provisions – Recordkeeping [326 IAC 20][40 CFR 63, Subpart G]

- (a) Pursuant to 40 CFR 63.147(b)(6), the Permittee shall keep in a readily accessible location the following records:

- (1) Process unit identification and description of the process unit.
 - (2) Stream identification code.
 - (3) Concentration of compounds listed in Table 9 of 40 CFR Part 63, Subpart G in parts per million, by weight; include documentation of the methodology used to determine concentration.
 - (4) Flow rate in liter per minute.
- (b) Pursuant to 40 CFR 63.147(f), if the Permittee uses process knowledge to determine the annual average concentration of a wastewater stream as specified in 40 CFR 63.144(b)(3) and/or uses process knowledge to determine the annual average flow rate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, the Permittee shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream.

D.6.25 General Reporting [326 IAC 20][40 CFR 63, Subpart G]

- (a) The Permittee shall submit Periodic Reports in accordance with the requirements of 40 CFR 63.152(c).
- (b) The Permittee shall submit additional reports in accordance with the requirements of 40 CFR 63.152(d), including reports of start-up, shutdown, and malfunction.

D.6.26 Record Keeping Requirements for Equipment Leaks [326 IAC 14] [40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.181(a), all records 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.
- (b) The Permittee shall maintain records of the information required by 40 CFR 63.181(b).
- (c) Pursuant to 40 CFR 63.181(c), for visual inspections of equipment subject to the provisions of 40 CFR Part 63, Subpart H, the Permittee shall document that the inspection was conducted and the date of the inspection. The Permittee shall maintain records as specified in Condition D.6.26(d) for leaking equipment identified in this inspection. These records shall be retained for 2 years.
- (d) When each leak is detected as specified in Conditions D.6.6, D.6.9, D.6.10, D.6.13, and D.6.14, the Permittee shall maintain copies of the records specified in 40 CFR 63.181(d). The information shall be recorded and kept for 2 years.
- (e) Pursuant to 40 CFR 63.181(f), the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in Conditions (D.6.7(a) and D.6.7(b)). The results shall include:
 - (1) The background level measured during each compliance test.
 - (2) The maximum instrument reading measured at each piece of equipment during each compliance test.
- (f) The Permittee shall maintain records of the information specified in 40 CFR 63.181(g) for closed-vent systems and control devices subject to the provisions of Condition D.6.13.

- (g) For vents or pumps subject to the requirements of 40 CFR 63.175 and 40 CFR 63.176, the Permittee shall maintain the records specified in Pursuant to 40 CFR 63.181(h) for the period of the quality improvement program for the process unit.

D.6.27 Reporting Requirements for Equipment Leaks [326 IAC 14] [40 CFR 63 Subpart H]

- (a) Pursuant to 40 CFR 63.182(d), the Permittee shall submit Periodic Reports.
- (1) A report containing the information in Conditions D.6.27(a)(2) shall be submitted semiannually as required in 40 CFR 63.182(d).
 - (2) For each process unit complying with the provisions of 40 CFR 63, Subpart H, the summary information listed below for each monitoring period during the 6-month period.
 - (i) The number of valves for which leaks were detected as described in Condition D.6.9(a), the percent leakers, and the total number of valves monitored;
 - (ii) The number of valves for which leaks were not repaired as required in Condition D.6.9(d), identifying the number of those that are determined non-repairable;
 - (iii) The number of pumps for which leaks were detected as described in Condition D.6.6(a), the percent leakers, and the total number of pumps monitored;
 - (iii) The number of pumps for which leaks were not repaired as required in Condition D.6.6(b);
 - (v) The number of connectors for which leaks were detected as described in Condition D.6.14(a), the percent of connectors leaking, and the total number of connectors monitored;
 - (vi) The number of connectors for which leaks were not repaired as required in Condition D.6.14(d), identifying the number of those that are determined non-repairable;
 - (vii) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
 - (viii) The results of all monitoring to show compliance with Conditions D.6.7(a), D.6.13(d), and 40 CFR 63.164(i) conducted within the semiannual reporting period.
 - (ix) If applicable, the initiation of a monthly monitoring program under Condition D.6.9(b)(1)(i), or a quality improvement program under either 40 CFR 63.175 or 63.176.
 - (x) If applicable, notification of a change in connector monitoring alternatives as described in Condition D.6.14(c)(1).
 - (3) Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

D.6.28 Record Keeping Requirements for Storage Vessels [326 IAC 20][40 CFR 63, Subpart G]

Pursuant to 40 CFR 63.123(a), the Permittee shall keep readily accessible records showing the dimensions and an analysis showing the capacity of each Group 2 storage vessel (identified as 200, 201, and 202). This record shall be kept as long as the storage vessel retains Group 2 status and is in operation.

D.6.29 Record Keeping and Reporting Requirements for Heat Exchange Systems [326 IAC 20]
[40 CFR 63, Subpart F]

- (a) Pursuant to 40 CFR 63.104(f)(1), the Permittee shall retain the following records:
- (1) Monitoring data required by this section indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination;
 - (2) Records of any leaks detected by procedures subject to Condition D.6.3(c) and the date the leak was discovered;
 - (3) The dates of efforts to repair leaks; and
 - (4) The method or procedure used to confirm repair of a leak and the date repair was confirmed.
- (b) Pursuant to 40 CFR 63.104(f)(2), if the Permittee invokes the delay of repair provisions for a heat exchange system, the following information shall be submitted in the next semiannual periodic report. If the leak remains unrepaired, the information shall also be submitted in each subsequent periodic report, until repair of the leak is reported.
- (1) The Permittee shall report the presence of the leak and the date that the leak was detected.
 - (2) The Permittee shall report whether or not the leak has been repaired.
 - (3) The Permittee shall report the reason(s) for delay of repair. If delay of repair is invoked due to the reasons described in 40 CFR 63.104(e)(2), documentation of emissions estimates shall also be submitted.
 - (4) If the leak remains unrepaired, the Permittee shall report the expected date of repair.
 - (5) If the leak is repaired, the Permittee shall report the date the leak was successfully repaired.

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 40

(n) Plant 40 is used to produce vinyl pyridine. The plant was initially constructed in 1969. Plant 40 consists of the following process units: reactor, separation, distillation, and vent tank. Emissions are vented through six vents identified as follows:

- (1) Column #3 Atmospheric Vent (S/V 40/001) used to vent emissions from the separation facilities;
- (2) Receiver Atmospheric Vents (S/V 40-002A, 40-002B, and 40-002C) used to vent emissions from the distillation facilities;
- (3) Still Atmospheric Vent (S/V 40-002C) used to vent emissions from the distillation facilities; and
- (4) Vent tank (S/V 40-004) used to vent emissions from Columns 1, 2, and 4.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 General Provision Relating to NESHAPs [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14, apply to the facility described in this section except when otherwise specified in 40 CFR 61, Subpart J - National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene.

D.7.2 Standards for 40 CFR 61, Subpart J [40 CFR 61.112] [326 IAC 14]

Pursuant to 40 CFR 61.112, the Permittee shall comply with the requirements of 40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources) for equipment in benzene service, including affected pumps; open-ended valves; open-ended lines; valves; and connectors.

D.7.3 General Standards for 40 CFR 61, Subpart V [60 CFR 61.242-1] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-1, the Permittee shall comply with the following requirements:

- (a) Each piece of equipment to which 40 CFR 61, Subparts J and V apply shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.
- (b) Equipment that is in vacuum service is excluded from the requirements of Conditions D.7.4 through D.7.13 if it is identified as required in Condition D.7.15(e)(5).
- (c) The definitions in 40 CFR 61, Subpart J, Section 61.111 are applicable to the Permittee.

D.7.4 Standards: Pumps [40 CFR 61.242-2] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-2, pumps subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a)
 - (1) Each pump shall be monitored monthly to detect leaks by the methods specified in Condition D.7.14(a), except as provided in 40 CFR 61.242-1(c) and Conditions D.7.4(d), (e), (f) and (g).
 - (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- (b)
 - (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (2) If there are indications of liquids dripping from the pump seal, a leak is detected.
- (c)
 - (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition D.7.12.
 - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Conditions D.7.4(a) and (b), provided the following requirements are met:
 - (1) Each dual mechanical seal system is:
 - (A) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
 - (B) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system; or
 - (C) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.
 - (2) The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 CFR part 60, is not in VOC service.
 - (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
 - (4) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 - (A) If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in Condition D.7.14 to determine the presence of VOC and VHAP in the barrier fluid.
 - (B) If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography column to limit the response of the monitor to VHAP, at the option of the Permittee.
 - (C) If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected.

- (5) Each sensor as described in Condition D.7.4(d)(3) is checked daily or is equipped with an audible alarm.
- (6)
 - (A) The Permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
 - (B) If indications of liquids dripping from the pump seal exceed the criteria established in Condition D.7.4(d)(6)(A), or if, based on the criteria established in Condition D.7.4(d)(6)(A), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
 - (C) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in Condition D.7.12.
 - (D) A first attempt at repair shall be made no later than five calendar days after each leak is detected.
- (e) Any pump that is designated, as described in Condition D.7.15(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Condition D.7.4(a), (c), and (d) if the pump:
 - (1) Has no externally actuated shaft penetrating the pump housing,
 - (2) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Condition D.7.14(b), and
 - (3) Is tested for compliance with Condition D.7.4(e)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (f) Any pump that is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system, it is exempt from Conditions D.7.4(a) through (e).
- (g) Any pump that is designated, as described in Condition D.7.15(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of Condition D.7.4(a) and (d)(4) through (d)(6) if:
 - (1) The Permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition D.7.4(a); and
 - (2) The Permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in Condition D.7.4(c) if a leak is detected.
- (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Condition D.7.4(a)(2) and (d)(4), and the daily requirements of Condition D.7.4(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly.

D.7.5 Standards: Compressors [40 CFR 61.242-3][40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-3, compressors subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to atmosphere, except as provided in 40 CFR 61.242-1 (c) and Condition D.7.5(g) and (h).
- (b) Each compressor seal system as required in Condition D.7.5(a) shall be:
 - (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
 - (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 61.242-11; or
 - (3) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.
- (c) The barrier fluid shall not be in VHAP service and, if the compressor is covered by standards under 40 CFR part 60, shall not be in VOC service.
- (d) Each barrier fluid system as described in Conditions D.7.5(a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
 - (1) Each sensor shall be checked daily or shall be equipped with an audible alarm unless the compressor is located within the boundary of an unmanned plant site.
 - (2) The Permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (e) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under Condition D.7.5(d)(2) of this section, a leak is detected.
- (f)
 - (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition D.7.12.
 - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (g) A compressor is exempt from Conditions D.7.5(a) and (b) if it is equipped with a closed-vent system that is used to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system, except as provided in Condition D.7.5(h).
- (h) Any Compressor that is designated for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of Condition D.7.5 (a) through (g) if the compressor:
 - (1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Condition D.7.14(b); and
 - (2) Is tested for compliance initially upon designation, annually, and at other times as requested.

D.7.6 Standards: Pressure Relief Devices in Gas/Vapor Service [40 CFR 61.242-4]
[40 CFR 61, Subpart J][326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-4, pressure relief devices in gas/vapor service subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Condition D.7.14(b).
- (b)
 - (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition D.7.12.
 - (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Condition D.7.14(b).
- (c) Any pressure relief device that is routed to a process or fuel gas system is exempt from the requirements of Condition D.7.6(a) and (b) of this section.
- (d) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Condition D.7.6(a) and (b), provided the Permittee complies with the following requirement:
 - (1) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition D.7.12.

D.7.7 Standards: Sampling Connecting Systems [40 CFR 61.242-5][40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-5, sampling connecting systems subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in 40 CFR 61.242-1 (c). Gases displaced during filling of the sample container are not required to be collected or captured.
- (b) Each closed-purge, closed-loop, or closed vent system shall comply with the following requirements:
 - (1) Return the purged process fluid directly to the process line; or
 - (2) Collect and recycle the purged process fluid; or
 - (3) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
 - (A) A waste management unit as defined in 40 CFR 63.111 if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams; or
 - (B) A treatment, storage, or disposal facility subject to regulation under 40 CFR Part 262, 264, 265, or 266; or

(C) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261.

(c) In-situ sampling systems and sampling systems without purges are exempt from Conditions D.7.7 (a) and (b).

D.7.8 Standards: Open-ended Valves or Lines [40 CFR 61.242-6][40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-6, open-ended valves and lines subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve except as provided in 40 CFR 61.242-1(c).
- (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Condition D.7.8(a) at all other times.
- (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of Condition D.7.8(a), (b) and (c).
- (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in Condition D.7.8(a) through (c) are exempt from the requirements of Condition D.7.8(a) through (c).

D.7.9 Standards: Valves [40 CFR 61.242-7] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-7, valves subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a) Each valve shall be monitored monthly to detect leaks by the method specified in Condition D.7.14(a) and shall comply with Conditions D.7.9(b) through (e), except as provided in Conditions D.7.9(f), (g), and (h) and 40 CFR 61.243-1 or 40 CFR 61.243-2, 40 CFR 61.242-1(c) .
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition D.7.12.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
 - (1) Tightening of bonnet bolts;
 - (2) Replacement of bonnet bolts;
 - (3) Tightening of packing gland nuts; and
 - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in Condition D.7.15(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Condition D.7.9(a) if the valve:
 - (1) Has no external actuating mechanism in contact with the process fluid;
 - (2) Is operated with emissions less than 500 ppm above background, as measured by the method specified in Condition D.7.14(b); and
 - (3) Is tested for compliance with Condition D.7.9(f)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in Condition D.7.15(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of Condition D.7.9(a) if:
 - (1) The Permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition D.7.9(a); and
 - (2) The Permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in Condition D.7.15(f)(2), as a difficult-to-monitor valve is exempt from the requirements of Condition D.7.9(a) if:
 - (1) The Permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
 - (2) The process unit within which the valve is located is an existing process unit; and
 - (3) The Permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

D.7.10 Standards: Pressure Relief Devices in Liquid Service and Connectors [40 CFR 61.242-8]
[40 CFR 61, Subpart J][326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-8, pressure relief devices and connectors subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirements:

- (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the Permittee shall follow either one of the following procedures, except as provided in 40 CFR 61.242-1(c):

- (1) The Permittee shall monitor the equipment within 5 days by the method specified in Condition D.7.14(a) and shall comply with the requirements of Conditions D.7.10(b) through (d).
 - (2) The Permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition D.7.12.
- (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under Condition D.7.9(e).

D.7.11 Standards: Surge Control Vessels and Bottoms Receivers [40 CFR 61.242-9][40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-9, surge control vessels and bottom receivers subject to the requirements of 40 CFR 61, Subpart J shall comply with the following requirement:

- (a) Each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in Table 1 or Table 2 of 40 CFR 61.242 shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel back to the process, except as provided in 40 CFR 61.242-1(c); or comply with the requirements of 40 CFR 63.119(b) or (c).

D.7.12 Standards: Delay of Repair [40 CFR 61.242-10] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-10, the Permittee shall comply with the following requirements:

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- (b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.
- (c) Delay of repair for valves will be allowed if:
- (1) The Permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - (2) When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.
- (d) Delay of repair for pumps will be allowed if:
- (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
 - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

D.7.13 Standards: Closed-Vent Systems [40 CFR 61.242-11][40 CFR 61, Subpart J][326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.242-11, the Permittee shall comply with the following requirements for closed-vent systems:

- (a) Closed-vent systems used to comply with provisions of 40 CFR 61, Subpart J shall comply with the provisions of 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c).
- (b) Except as provided in Conditions D.7.13(e) through (g), each closed vent system shall be inspected according to the procedures and schedule specified in Condition D.7.13(b)(1) or (2), as applicable.
 - (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the following requirements:
 - (A) Conduct an initial inspection according to the procedures in Condition D.7.14(a); and
 - (B) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
 - (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
 - (A) Conduct an initial inspection according to the procedures in D.7.14(a); and
 - (B) Conduct annual inspections according to the procedures in D.7.14(a).
- (c) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in Condition D.7.13(d).
 - (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - (2) Repair shall be completed no later than 15 calendar days after the leak is detected.
- (d) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the Permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- (e) If a closed vent system is operated under a vacuum, it is exempt from the inspection requirements of Condition D.7.13(b)(1)(A) and (2) of this section.

- (f) Any parts of the closed vent system that are designated, as described in Condition D.7.13(h)(1) of this section, as unsafe-to-inspect are exempt from the inspection requirements of paragraphs D.7.13(b)(1)(A) and (2) of this section if they comply with the following requirements:
 - (1) The Permittee determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Condition D.7.13(b)(1)(A) or (2) of this section; and
 - (2) The Permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- (g) Any parts of the closed vent system that are designated, as described in Condition D.7.13(h)(2) of this section, as difficult-to-inspect are exempt from the inspection requirements of D.7.13(b)(1)(A) and (2) of this section if they comply with the following requirements:
 - (1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
 - (2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.
- (h) The owner or operator shall record the following information:
 - (1) Identification of all parts of the closed vent system that are designated as unsafe-to-inspect, an explanation of why the equipment is unsafe-to-inspect, and the plan for inspecting the equipment.
 - (2) Identification of all parts of the closed vent system that are designated as difficult-to-inspect, an explanation of why the equipment is difficult-to-inspect, and the plan for inspecting the equipment.
 - (3) For each inspection during which a leak is detected, a record of the information specified in D.7.15(c).
 - (4) For each inspection conducted in accordance with D.7.14(a) 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.
 - (5) For each visual inspection conducted in accordance with Condition D.7.13(b)(1)(B) during which no leaks are detected, a record that the inspection were performed, the date of the inspection, and a statement that no leaks were detected.
- (i) Closed vent systems used to comply with 40 CFR 61, Subpart J shall be operated at all times when emissions may be vented to them.

Compliance Determination Requirements

D.7.14 Test Methods and Procedures [40 CFR 61.245] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.245, the Permittee shall comply with the following test methods and procedures:

- (a) Monitoring, as required in Conditions D.7.4 through D.7.6 and 40 CFR 61.15, shall comply with the following requirements:

- (1) Monitoring shall comply with Method 21 of Appendix A of 40 CFR Part 60.
 - (2) The detection instrument shall meet the performance criteria of Method 21.
 - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
 - (4) Calibration gases shall be:
 - (A) Zero air (less than 10 ppm of hydrocarbon in air); and
 - (B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
 - (5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- (b) When equipment is tested for compliance with or monitored for no detectable emissions, the Permittee shall comply with the following requirements:
- (1) The requirements of Conditions D.7.14(a)(1) through (a)(4) shall apply.
 - (2) The background level shall be determined, as set forth in Method 21.
 - (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
 - (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- (c)
- (1) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the Permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it shall be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 (incorporated by the reference as specified in 40 CFR 61.18) shall be used.
 - (2)
 - (A) The Permittee may use engineering judgment rather than the procedures in Condition D.7.14(c)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When a Permittee and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in Condition D.7.14(c)(1) shall be used to resolve the disagreement.
 - (B) If a Permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in Condition D.7.14(c)(1).
 - (3) Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.15 Record Keeping Requirements [40 CFR 61.246] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 61.246, the Permittee shall comply with the following recordkeeping requirements:

- (a) The Permittee may comply with the recordkeeping requirements for process units subject to 40 CFR 61, Subparts J and V in one recordkeeping system if the system identifies each record by each process unit.
- (b) When each leak is detected as specified in Conditions D.7.4, D.7.5, D.7.6, D.7.9 and D.7.10, the following requirements apply:
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Condition D.7.9(c) and no leak has been detected during those 2 months.
 - (3) The identification on equipment, except on a valve may be removed after it has been repaired.
- (c) When each leak is detected as specified in Conditions D.7.4, D.7.5, D.7.6, D.7.9 and D.7.10, the following information shall be recorded in a log and shall be maintained on site in a readily accessible location:
 - (1) The instrument and operator identification numbers and the equipment identification number.
 - (2) The date the leak was detected and the dates of each attempt to repair the leak.
 - (3) Repair methods applied in each attempt to repair the leak.
 - (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in Condition D.7.14(a) after each repair attempt is equal to or greater than 10,000 ppm.
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (6) The signature of the Permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (9) The date of successful repair of the leak.
- (d) The following information pertaining to the design requirements for closed-vent systems and control devices described in Condition D.7.13 shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (2) The dates and descriptions of any changes in the design specifications.

- (3) Periods when the closed-vent systems required in Conditions D.7.4, D.7.5, D.7.6, D.7.7 and D.7.11 are not operated as designed.
 - (4) Dates of startups and shutdowns of the closed-vent systems required in Conditions D.7.4, D.7.5, D.7.6, D.7.7 and D.7.11.
- (e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 CFR 61, Subpart J.
 - (2)
 - (A) A list of identification numbers for equipment that the Permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.
 - (B) The designation of this equipment for no detectable emissions shall be signed by the Permittee.
 - (3) A list of equipment identification numbers for pressure relief devices required to comply with Condition D.7.6.
 - (4)
 - (A) The dates of each compliance test required in Conditions D.7.4, D.7.5, D.7.6, D.7.9 and 40 CFR 61.135(g).
 - (B) The background level measured during each compliance test.
 - (C) The maximum instrument reading measured at the equipment during each compliance test.
 - (5) A list of identification numbers for equipment in vacuum service.
- (f) The following information pertaining to all valves subject to the requirements of Conditions D.7.9(g) and (h) and to all pumps subject to the requirements of Condition D.7.4(f) shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump.
 - (2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- (g) The following information shall be recorded in a log that is kept in a readily accessible location:
- (1) Design criterion required in Condition D.7.4(d)(6), D.7.5(e)(2) and 40 CFR 61.135(e)(4) and an explanation of the design criterion; and
 - (2) Any changes to this criterion and the reasons for the changes.

- (h) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:
 - (1) An analysis demonstrating the design capacity of the process unit, and
 - (2) An analysis demonstrating that equipment is not in VHAP service.
- (i) Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

D.7.16 Reporting Requirements [40 CFR 61.247] [40 CFR 61, Subpart J] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart J and 40 CFR 60.247, the Permittee shall comply with the following reporting requirements:

- (a) The Permittee shall submit a semiannual report to the IDEM, OAQ. The report shall include the following information:
 - (1) Process unit identification.
 - (2) For each month during the semiannual reporting period,
 - (A) Number of valves for which leaks were detected as described in Condition D.7.9(b).
 - (B) Number of valves for which leaks were not repaired as required in Condition D.7.9(d).
 - (C) Number of pumps for which leaks were detected as described in Conditions D.7.4(b) and (d)(6).
 - (D) Number of pumps for which leaks were not repaired as required in Condition D.7.4(c) and (d)(6).
 - (E) Number of compressors for which leaks were detected as required in Condition D.7.5(e).
 - (F) Number of compressors for which leaks were not repaired as required in Condition D.7.5(f).
 - (G) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
 - (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
 - (4) Revisions to items reported in the initial report required by 40 CFR 61.247(a) if changes have occurred since the initial report or subsequent revisions to the initial report were submitted. Note: Compliance with the requirements of 40 CFR 61.10(c) is not required for revisions documented under this Condition.
 - (5) The results of all performance tests and monitoring to determine compliance with no detectable emissions conducted within the semiannual reporting period.

- (b) Pursuant to 40 CFR 61.247(c), the semiannual reports shall be submitted according to the reporting schedule specified in the initial report, unless a revised schedule has been submitted in a subsequent semiannual report.
- (c) If the Permittee elects to comply with the provisions of 40 CFR 61.243-1 and 40 CFR 61.243-2, the Permittee shall notify the IDEM and Administrator of the alternative standard selected 90 days before implementing either of the provisions.
- (d) An application for approval of construction or modification under 40 CFR 61.05(a) and 61.07 shall not be required provided:
 - (1) The new source complies with the standards in 40 CFR 61.242;
 - (2) The new source is not part of the construction of a process unit; and
 - (3) In the next semiannual report required by Condition D.7.16(a), the information in 40 CFR 61.247(a)(5) is reported.
- (e) If the Permittee chooses to comply with 40 CFR 65, Subpart C or F, an application for approval of construction or modification, as required under 40 CFR 61.105 and 61.107 will not be required if:
 - (1) The new source complies with 40 CFR 65.106 through 65.115 and with 40 CFR 65, Subpart C, for surge control vessels and bottom receivers;
 - (2) The new source is not part of the construction of a process unit; and
 - (3) In the next semiannual report required by 40 CFR 65.120(b) and 65.48(b), the information in Condition D.7.16(a) is reported.

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: PLANT 47 and 48

- (m) Plant 48, used to manufacture a variety of specialty chemicals. The plant was initially constructed in 1972 and consists of reactors (with emissions controlled by Scrubber, identified as AS-14) and distillation facilities.
- (o) Plant 47 is used to manufacture a variety of specialty chemicals. The plant was initially constructed in 1979, modified in 2011 and consists of the following facilities:
 - (1) Reactor, controlled by a scrubber;
 - (2) Distillation;
 - (3) Separation;
 - (4) One (1) 0.4 MMBtu per hour waste gas flare (identified as unit HC47GFS), used to control emissions from Plant 47. This unit was installed in 1979 and exhausts to stack S-47-001;
 - (5) Continuous and batch reactors, constructed in 2011, vented to scrubber GK-900, as required, and exhausted to stack XX.
 - (6) Extraction and recovery operations, constructed in 2011, vented to scrubber GK-900, as required, and exhausted to stack XX.
 - (7) Condenser and decanter separations, constructed in 2011, vented to scrubber GK-900, and exhausted to stack XX.
 - (8) Batch distillation, constructed in 2011, exhausted to scrubber GK-900 stack XX.
 - (9) Liquid loading of intermediates and products into totes and tanker trucks, constructed in 2011, vented to atmosphere.
 - (10) One (1) storage silo, constructed in 2011, with a maximum loading rate of 30 tons per hour and a maximum unloading rate of 1.8 tons per hour, equipped with a dust collector for particulate control, and exhausted to stack XX.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Volatile Organic Compound (VOC) Limits [326 IAC 2-3]

Volatile Organic Compound (VOC) emissions from Plant 48 shall be limited to less than 40.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall be reached by limiting VOC emissions for Plant 48 and using control equipment, scrubber identified as AS-14, as appropriate to the extent that the control equipment shows reduction efficiency sufficient to demonstrate compliance with this limit. Compliance with these limits shall render requirements of 326 IAC 2-3 nonapplicable to Plant 48.

D.8.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

- (a) PM₁₀ emissions from the iron oxide storage silo baghouse exhaust shall not exceed 11.94 lb/hr.
- (b) PM_{2.5} emissions from the iron oxide storage silo baghouse exhaust shall not exceed 11.94 lb/hr.
- (c) Iron oxide throughput shall not exceed 15,768 tons per twelve consecutive month period with compliance determined at the end of each month (508 hours of emissions per twelve consecutive month period)

Compliance with these emission limits along with the net change of emissions from Plant 27, Plant 29, Plant 38 and Plant 41 will ensure the potential to emit PM₁₀ is less than 15 tons and PM_{2.5} is less than 10 tons per year and will render the requirements of 326 IAC 2-2, not applicable to Minor Source Modification 097-30902-00315 for PM₁₀ and PM_{2.5}.

D.8.3 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Emission Limitations), particulate matter emissions from the iron oxide storage silo constructed in 2011 shall not exceed 0.03 grains per dry standard cubic foot.

D.8.4 HAP Minor Limit [40 CFR 63]

- (a) Total HAP emissions from the Chlorination Reactor and 2,3-DCP Crude Reactor shall not exceed 0.228 lb/hr while both reactors are operating and controlled by scrubber GK-900. Compliance with this limit along with other HAP limits in this permit ensure the entire source is an area source of HAPs.
- (b) Methanol emissions from the Plant 48 Scrubber Vent shall not exceed 0.011 lb/hr at all times the scrubber is operating.

Compliance Determination Requirements

D.8.5 Particulate Control [326 IAC 2-2][326 IAC 6-3-2]

- (a) In order to ensure compliance with Condition D.8.2 and D.8.3, the baghouse used for particulate control shall be in operation and control emissions from the iron oxide storage silo at all times that the iron oxide storage silo is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.8.6 Volatile Organic Compounds (VOC) and HAPs

- (a) In order to ensure compliance with Conditions D.8.1, the Permittee shall maintain records of all product runs and any applicable compliance stack tests.
- (b) The monthly VOC emissions of the Plant 48 shall be calculated by the following formula:

$$E_{\text{VOC48}} = W_{\text{VOC48u}} + \sum [W_{\text{VOC48c}} * (1 - C_{\text{eff}})],$$

where: E_{VOC48} = the monthly VOC emissions from Plant 48;
 W_{VOC48u} = the monthly Plant 48 VOC emission when operating without control;

W_{VOC48c} = the monthly Plant 48 VOC emission for each process when operating with control;
 C_{eff} = the scrubber AT-14 control efficiency for each process;

Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

- (c) In order to ensure compliance with Condition D.8.4, the scrubber AS-14 shall be used at all times when HAPs are being used in the reactors of Plant 48.

D.8.7 Testing Requirements (326 IAC 2-7-6(1),(6)) [326 IAC 2-1.1-11]

- (a) In order to demonstrate the compliance status with Condition D.8.1, the Permittee shall conduct a performance test of the Plant 48 scrubber identified as AS-14 to verify its control efficiency for VOC and HAP for each process using the scrubber as control, utilizing methods as approved by the IDEM Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration or if there is a change to the process resulting in increased emissions. If the scrubber is not in operation five (5) years after the last compliance demonstration, the performance test shall be completed within 180 days after restarting operation of scrubber AS-14. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate the compliance status with Condition D.8.4 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform total HAP testing on the scrubber exhaust controlling emissions from the Chlorination Reactor and 2,3-DCP Crude Reactor, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The total HAP emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (c) In order to demonstrate the compliance status with Condition D.8.4 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform methanol testing on the Plant 48 Reactor Vent, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The Methanol emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.8 Scrubber

- (a) In order to demonstrate the compliance status with Condition D.8.1, the Permittee shall monitor the pressure drop across the scrubber identified as AS-14 at least once per day. When for any one reading the pressure drop is outside the normal range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) In order to demonstrate the compliance status with Condition D.8.1, the Permittee shall monitor the scrubber flow rate for scrubber AS-14 at least once per day. When for any one reading the flow rate is outside the normal range established during the latest stack test, the Permittee shall

take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A flow rate reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (c) In order to demonstrate the compliance status with Condition D.8.2, the Permittee shall monitor the pressure drop across scrubber GK-900 at least once per day. When for any one reading the pressure drop is outside the normal range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (d) In order to demonstrate the compliance status with Condition D.8.2, the Permittee shall monitor the scrubber flow rate for scrubber GK-900 at least once per day. When for any one reading the flow rate is outside the normal range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A flow rate reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (e) The instruments used for determining the flow rate and pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.8.9 Visible Emissions Notations

- (a) Visible emission notations of the iron oxide storage silo baghouse stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.10 Record Keeping Requirement

- (a) In order to document the compliance status with Condition D.8.1, the Permittee shall maintain records in accordance with (1) through (3) below.
 - (1) Calendar dates covered in the compliance determination period, including the dates,

times, and batch identification of operations during which the scrubber identified as AS-14 was in operation to control VOC emissions.

- (2) Actual monthly VOC emissions for Plant 48, including periods when scrubber identified as AS-14 in Plant 48 was and was not in operation;
 - (3) The VOC content of each chemical mixture.
- (b) In order to document the compliance status with Condition D.8.9, the Permittee shall maintain a daily record of visible emission notations of the iron oxide storage silo stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
 - (c) In order to document the compliance status with Condition D.8.4, the Permittee shall maintain a daily record of scrubber liquid flow rate and pressure drop of scrubber GK-900 and scrubber AS-14. The Permittee shall include in its daily record when a scrubber liquid flow rate or pressure drop is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
 - (e) In order to document the compliance status with Condition D.8.2, the Permittee shall maintain a monthly record of the amount of iron oxide used during a twelve consecutive month period.

D.8.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.8.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(34).

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (k) Plant 38 used to manufacture precursors to various grades of vitamin B-3.
- (1) One (1) B-3 production unit, constructed in 1967, including the following emission units:
- (A) Reactors;
 - (B) Separators;
 - (C) An evaporator with emissions controlled by a scrubber;
 - (D) One (1) packaging facility consisting of the following:
 - (i) one (1) mill (identified as 28-MB), with non-vented pneumatic conveying system,
 - (ii) One (1) pneumatic conveying system identified as Vacuum Receiver 28- VR (known as the hurricane blower) installed in 1997, with a maximum operating capacity of 6,750 pounds per hour. This unit exhausts at stack S-28-002.
 - (iii) One pick-up collector (known as central vac), installed in 1997, with a maximum operating capacity of 150 pounds per hour. This unit exhausts at stack S-28-003.
- And controlled by the following two (2) baghouses:
- (i) Micro Pul (known as the downstairs collector), installed in 1991, with a maximum operating capacity of 670 pounds per hour, exhausting at stack S-28-004, and
 - (ii) Penthouse collector (known as the MAC dust collector), installed in 2000, with a maximum operating capacity of 1,500 pounds per hour, exhausting at stack S-28-001.
- (2) One (1) B-3 Spray Column production line, approved for construction in 2011, with a maximum throughput of 11 tons/hr, and consisting of the following process units:
- (A) One plug flow reactor, without a process vent
 - (B) One liquid/liquid separation unit, without a process vent
 - (C) One spray dry column
 - (D) One product classifier
 - (E) One solid B-3 storage silo
 - (F) One final product packaging line
 - (G) One vertical fixed roof liquid 3-cyanopyridine (3CN) storage tank, identified as MT-1600, with a maximum storage capacity of 51,820 gallon
 - (H) One vertical fixed roof process water storage tank, identified as MT-1700
 - (I) One vertical fixed roof liquid caustic storage tank

The packaging line is uncontrolled. The spray column, product classifier and storage silo are controlled by a single product recovery baghouse, exhausting outdoors.

- (l) Plant 41 used to manufacture pyridine derivatives. The plant was initially constructed in 1968. Plant 41 consists of the following facilities:
- (1) Reactor;
 - (2) Separation facility with emissions controlled using one (1) 11.0 MMBtu per hour waste gas incinerator (identified as unit HN013), which exhausts to stack S-41-002; and,
 - (3) Distillation.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 General Standards for 40 CFR 63, Subpart GGG [40 CFR 63.1252]

- (a) Opening of a safety device, as defined in 40 CFR 63.1251, is allowed at any time conditions require it to do so to avoid unsafe conditions.
- (b) Closed-vent systems that contain bypass lines that could divert a vent stream away from a control device used to comply with the requirements in 40 CFR 63.1253, 63.1254, and 63.1256 shall comply with the requirements of Table 4 of 40 CFR 63, Subpart GGG and Conditions D.9.1(b)(1) or (2). 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 condition.
 - (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 40 CFR 63.1259(i)(6)(i). 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 40 CFR 63.1259(i)(6)(ii).
- (c) Except as provided in Condition D.9.1(c)(2), the Permittee shall comply with the requirements in Condition D.9.1(c)(1) for heat exchange systems that cool process equipment or materials used in pharmaceutical manufacturing operations.
 - (1) The heat exchange system shall be treated according to the provisions of 40 CFR 63.104, except that the monitoring frequency shall be no less than quarterly.
 - (2) For identifying leaking equipment, the Permittee of heat exchange systems on equipment which meet current good manufacturing practice (CGMP) requirements of 21 CFR Part 211 may elect to use the physical integrity of the reactor as the surrogate indicator of heat exchange system leaks around the reactor.

D.9.2 Process Vent Standards [40 CFR 63.1254]

The plant shall comply with the following standards. Notification of a change in the compliance method for any process shall be reported according to the procedures of 40 CFR 63.1260(h).

- (a) 900 / 1800 kg Compliance Option [40 CFR 63.1254(a)(2) and (3)]:
- (1) Actual HAP emissions from the sum of all process vents within a process (as defined in 40 CFR 63.1251) must not exceed 900 kilograms (kg) in any 365 day period.
 - (2) Actual HAP emissions from the sum of all process vents at the source within processes complying with the 900 kilogram limit in 40 CFR 63.1254(a)(2)(i) are limited to a maximum of 1,800 kilograms in any 365 day period.
 - (3) Emissions from vents that are subject to the requirements of 40 CFR 63.1254(a)(3) and emissions from vents that are controlled in accordance with the alternative limit in 40 CFR 63.1254(c) shall be excluded from the sums calculated as indicated in D.9.2(a)(1) and (a)(2).
 - (4) The Permittee may switch from compliance with 40 CFR 63.1254(a)(2) to Compliance with 40 CFR 63.1254(a)(1) only after at least one year of operation in compliance with 40 CFR 63.1254(a)(2).
 - (5) Uncontrolled HAP emissions from a process vent must be reduced by 98 percent or in accordance with any of the procedures in paragraphs 40 CFR 63.1254(a)(1)(ii)(A) through (D) if the uncontrolled HAP emissions from the vent exceed 25 tons per year, and the flow-weighted average flowrate (FR_a) calculated using Equation 1 of this subpart is less than or equal to the flowrate index (FRI) calculated using Equation 2 of this subpart.

$$FR_a = \frac{\sum_{i=1}^n (D_i) (FR_i)}{\sum_{i=1}^n (D_i)} \quad (\text{Equation 1})$$

$$FRI = 0.02 * (HL) - 1,000 \quad (\text{Equation 2})$$

Where:

- FR_a = flow-weighted average flow rate 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
FRI = flowrate index, scfm
HL = annual uncontrolled HAP emissions, lb/yr, as defined in 40 CFR 63.1251.

- (b) As an alternative standard, the Permittee of an existing or new affected source may comply with the process vent standards by routing vents from a process 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 halides and halogens of 20 ppmv or less. If the Permittee is routing emissions to a noncombustion control device, it must achieve an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 50 ppmv or less, and an outlet concentration of hydrogen halides and halogens of 50 ppmv or less. Any process vents within a process that are not routed to this control device must be controlled in accordance with the provisions of 40 CFR 63.1254(a) or (b), as applicable. Initial compliance with the outlet concentrations is demonstrated in accordance with the initial compliance procedures described in 40 CFR 63.1257(d)(1)(iv), and continuous compliance is demonstrated in accordance with the emission monitoring requirements described in 40 CFR 63.1258(b)(5).

D.9.3 Monitoring and Compliance Demonstration Requirements [40 CFR 63.1258]

Each process in Plant 41 shall comply with the following based on the compliance option chosen and the control equipment used in accordance with 40 CFR 63.1258:

- (a) For control devices that control vent streams totaling less than 1 ton per year HAP emissions, before control, the Permittee shall verify daily that the control device is operating properly. If the control device is used to control batch process vents alone or in combination with other streams, the verification may be on a per batch basis. This verification shall include, but not be limited to, a daily or per batch demonstration that the unit is working as designed and may include the daily measurements of the parameters of Condition D.9.3.
- (b) For condensers, the Permittee shall establish the maximum condenser outlet temperature or product side temperature as a site-specific operating parameter and the Permittee shall measure and record the outlet gas temperature or product side temperature at least every 15 minutes during the period in which the condenser is functioning in achieving HAP removal.
 - (1) The temperature monitoring device must be accurate to within ± 2 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.
- (c) For liquid scrubbers, the Permittee shall establish a minimum scrubber liquid flow rate or pressure drop as a site-specific operating parameter which must be measured and recorded every 15 minutes during the period in which the scrubber is operating to control HAPs. If the scrubber uses a caustic solution to remove acid emissions, the Permittee shall establish a minimum pH of the effluent scrubber liquid as a site-specific operating parameter which must be monitored at least once a day. As an alternative to measuring pH, the Permittee may elect to continuously monitor the caustic strength of the scrubber effluent. The minimum scrubber flowrate or pressure drop shall be based on the conditions anticipated under worst-case conditions.
 - (1) The monitoring device(s) used to determine the pressure drop shall be certified by the manufacturer to be accurate to within a gauge pressure of ± 10 percent of the maximum pressure drop measured.
 - (2) The monitoring device(s) used for measurement of scrubber liquid flow rate shall be certified by the manufacturer to be accurate within ± 10 percent of the design scrubber liquid flow rate.
 - (3) The monitoring device(s) shall be calibrated annually.
- (d) For each thermal incinerator, the Permittee shall establish the minimum 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 functioning in achieving the HAP removal.
 - (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 monitoring device must be calibrated annually.

- (e) As an alternative compliance option to Conditions D.9.3(a) through (d), the Permittee shall monitor and record the outlet HAP concentration or both the outlet TOC concentration and the outlet hydrogen halide and halogen concentration every fifteen (15) minutes during the period in which the device is functioning in achieving the required HAP removal. The HAP and TOC monitor must meet the requirements of EPA Performance Specification 8 or 9 of Appendix B of 40 CFR 60 and shall be installed, calibrated, and maintained according to 40 CFR 63.8. As part of the QA/QC Plan, calibration of the device must include, at a minimum, quarterly cylinder gas audits.
- (f) For closed vent system visual inspections, the Permittee shall comply with 40 CFR 63.1252(b).
- (g) Averaging periods for parametric monitoring levels shall be established according to the following:
 - (1) A daily (24-hour) or block average shall be calculated as the average of all values for a monitored parameter level recorded during the operating day or block.
 - (2) The operating day or block shall be defined in the Notification of Compliance Status report. The daily average may be from midnight to midnight or another continuous 24-hour period. The block average is limited to a period of time that is, at a maximum, equal to the time from the beginning to end of a batch process.
 - (3) Monitoring values taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow, shall not be considered in the averages. Where flow to the device could be intermittent, the Permittee shall install, calibrate and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow.
- (h) For devices controlling less than 10 tons per year of HAP for which a performance test is not required, the parametric levels shall be set based on the design evaluation required in 40 CFR 63.1257(d)(3)(i). If a performance test is conducted, the monitoring parameter level shall be established according to the procedures in Condition D.9.3(i).
- (i) For devices controlling greater than 10 tons per year of HAP for which a performance test is required, the parameter level must be established as follows:
 - (1) If the operating parameter level to be established is a maximum, it must be based on the average of the values from each of the three test runs.
 - (2) If the operating parameter level to be established is a minimum, it must be based on the average of the values from each of the three test runs.
 - (3) The Permittee may establish the parametric monitoring level(s) based on the performance test supplemented by engineering assessments and manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values. The rationale for the specific level for each parameter, including any data and calculations used to develop the level(s) and a description of why the level indicates proper operation of the control device shall be provided in the precompliance report. The procedures specified in this section have not been approved by the Administrator and determination of the parametric monitoring level using these procedures is subject to review and approval by the Administrator.

- (j) For devices controlling batch process vents alone or in combination with other streams, the parameter level(s) shall be established in accordance with the following:
 - (1) If more than one batch emission episode has been selected to be controlled, a single level for the batch process(es) shall be determined from the initial compliance demonstration.
 - (2) Instead of establishing a single level for the batch process(es), the Permittee may establish separate levels for each batch emission episode, selected to be controlled. If separate monitoring levels are established, the Permittee must provide a record, indicating at what point in the daily schedule or log of processes required to be recorded, the parameter being monitored changes levels and must record at least one reading of the new parameter level, even if the duration of monitoring for the new parameter is less than 15-minutes.
- (k) An exceedance of an operating parameter is defined as one of the following:
 - (1) If the parameter, averaged over the operating day or block, is below a minimum value established during the initial compliance demonstration.
 - (2) If the parameter, averaged over the operating day or block, is above the maximum value established during the initial compliance demonstration.
 - (3) Each loss of all pilot flames for flares.
- (l) If the Permittee is complying with the 40 CFR 63.1254(a)(2), the Permittee shall demonstrate continuous compliance with the 900 and 1,800 kg/yr emission limits by calculating daily 365-day rolling summations of emissions. During periods of planned routine maintenance when emissions are controlled as specified in 40 CFR 63.1252(h), the Permittee must calculate controlled emissions assuming the HAP emissions are reduced by 93 percent.
- (m) If the Permittee chooses to comply with the requirements of 40 CFR 63.1252(e)(2) and (3), the Permittee shall calculate a yearly rolling average of kg HAP consumption per kg production and kg VOC consumption per kg production every month or every 10 batches. Each rolling average kg/kg factor that exceeds the value established in 40 CFR 63.1257(f)(1)(ii) will be considered a violation of the emission limit.
- (n) If the Permittee chooses to comply with the requirements of 40 CFR 63.1252(d) shall meet all monitoring requirements specified in Conditions D.9.3(a) through (j), as applicable, for all processes and storage tanks included in the emissions average.
- (o) For each vapor collection system, closed-vent system, fixed roof, cover, or enclosure required to comply with condition D.9.3, the Permittee shall comply with the requirements of 40 CFR 63.1258(h).

D.9.4 Equipment Leaks Standard [40 CFR 63.1255]

The following provisions apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, control devices, and closed-vent systems that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year and are located at Plant 41.

- (a) Equipment to which 40 CFR 63, Subpart GGG applies shall be identified such that it can be distinguished readily from equipment that is not subject to this NESHAP. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process boundaries by some form of weatherproof identification. If changes are made to the affected source subject to

the leak detection requirements, equipment identification for each type of component shall be updated, if needed, within 90 calendar days or by the next Periodic Report following the end of the monitoring period for that component, whichever is later.

- (b) When each leak is detected by visual, audible, or olfactory means, or by monitoring as described in 40 CFR 63.180(b) or (c), the following requirements apply:
- (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - (2) The identification on a valve in light liquid or gas/vapor service may be removed after it has been monitored as specified in 40 CFR 63.1255(e)(7)(iii), and no leak has been detected during the follow-up monitoring.
 - (3) The identification on equipment, except on a valve in light liquid or gas/vapor service, may be removed after it has been repaired.
- (c) In all cases where the provisions of 40 CFR 63, Subpart GGG require the Permittee to repair leaks by a specified time after the leak is detected, it is a violation of this condition to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of this condition. However, if the repairs are unsuccessful, a leak is detected and the Permittee shall take further action as required by applicable provisions of this condition.
- (d) The following process components in VOHAP/ VOC service shall comply with design standards, shall be operated in accordance with work practice standards and shall undergo periodic monitoring in accordance with the provisions cited below. Periodic monitoring shall be performed in accordance with 40 CFR 63.1255(b)(4)(v) and 40 CFR 63.1255(a)(11)(iv).
- (1) Pumps in light liquid service shall be operated in accordance with the standard at 40 CFR 63.1255(c);
 - (2) Compressors shall be operated in accordance with the standards at 40 CFR 63.1255(b)(3);
 - (3) Pressure relief devices in gas/vapor service shall be operated in accordance with the standard at 40 CFR 63.1255(b)(3);
 - (4) Sampling connection systems shall be operated in accordance with the standard at 40 CFR 63.1255(b)(3);
 - (5) Open ended valves or lines shall be operated in accordance with the standard at 40 CFR 63.1255(d);
 - (6) Valves in gas/vapor and light liquid service shall be operated in accordance with the standard at 40 CFR 63.1255(e);
 - (7) Closed-vent systems and control devices used to comply with this shall be operated in accordance with the standard at 40 CFR 63.1255(b)(4)(ii);
 - (8) Agitators in gas/vapor and light liquid service shall be operated in accordance with the standard at 40 CFR 63.1255(c);

- (9) Pumps, valves, connectors, and agitators in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service shall be operated in accordance with the standard at 40 CFR 63.1255(b)(3); and
 - (10) Connectors in gas/vapor and light liquid service shall be operated in accordance with the standard at 40 CFR 63.1255(b)(4)(iii).
- (e) As an alternative to complying with Conditions D.9.4 (d)(1) through D.9.4 (d)(6) and D.9.4 (d)(8) through D.9.4 (d)(10), system components may comply with 40 CFR 63.1255(b)(4)(iv).
- (f) Pursuant to 40 CFR 63.1255(b)(3), which references 40 CFR 63.179 (Alternative means of emission limitation: Enclosed-vented process units), process units enclosed in such a manner that all emissions from equipment leaks are vented through a closed-vent system to a control device meeting the requirements of 40 CFR 63.172 and 40 CFR 1255(b)(4)(ii) are exempted from the requirements of 40 CFR 63.163 through 171, and 40 CFR 63.173 through 174 as referenced by 40 CFR 63.1255. The enclosure shall be maintained under a negative pressure at all times while the process unit is in operation to ensure that all emissions are routed to the control device.
- (g) The following equipment is exempt from the monitoring requirements as specified in 40 CFR 63.1255(f)(1)(i) through (iv) provided the Permittee meets the requirements specified in 40 CFR 63.1255(f)(2), (3) or (4) as applicable. All equipment must be assigned to a group of processes.
- (1) Equipment that is designated as unsafe to monitor or unsafe to inspect pursuant to 40 CFR 63.1255(f)(2);
 - (2) Equipment that is difficult to monitor or difficult to inspect pursuant to 40 CFR 63.1255(f)(3); and
 - (3) Connectors that are inaccessible, ceramic, or ceramic-lined pursuant to 40 CFR 63.1255(f)(4).
- (h) The following facilities are not subject to the equipment leaks standards in 40 CFR 63.1255:
- (1) Research and development facilities, activities, and equipment [40 CFR 63.1250(d)];
 - (2) Components on transportation equipment and containers (e.g., railroad cars, tanker trucks and drums);
 - (3) Utilities and non-process lines [40 CFR 63.1255(a)(5)];
 - (4) Bench scale processes [40 CFR 63.1255(a)(6)];
 - (5) Equipment in vacuum service [40 CFR 63.1255(a)(8)];
 - (6) Waste components;
 - (7) Equipment that is in HAP service but that is in such service less than 300 hours per calendar year [40 CFR 63.1255(a)(10)]; and
 - (8) Closed loop heat exchange systems [40 CFR 63.1255(a)(5)].

D.9.5 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Emission Limitations), the particulate matter emissions from the packaging facilities constructed in 1967 and 2011, the spray dryer, product classifier and storage silo shall be limited to 0.03 grains per dry standard cubic foot.

D.9.6 Standards: Surge Control Vessels and Bottom Receivers [40 CFR 63, Subpart GGG][326 IAC 14]

Pursuant to 40 CFR 63.1255(b)(2)(vi), each surge control vessel or bottoms receiver shall comply with 40 CFR 63.1254.

- (a) For each process, the Permittee of an existing affected source must comply with the requirements in Conditions D.9.6(a)(1) and (3) or Conditions D.9.6(a)(2) and (3). Initial compliance with the required emission limits or reductions in Conditions D.9.6(a)(1) through (3) is demonstrated in accordance with the initial compliance procedures described in 40 CFR 63.1257(d) and continuous compliance is determined in accordance with the monitoring requirements described in 40 CFR 63.1258.
 - (1) (A) Uncontrolled HAP emissions from the sum of all process vents within a process that are not subject to the requirements of Condition D.9.6(a)(3) shall be reduced by 93 percent or greater by weight, or as specified in Condition D.9.6(a)(1)(B). Notification of changes in the compliance method shall be reported according to the procedures in 40 CFR 63.1260(h).
 - (B) Any one or more vents within a process may be controlled in accordance with any of the procedures in Conditions D.9.6(a)(1)(B)(i) through (iv). All other vents within the process must be controlled as specified in Conditions D.9.6(a)(1)(A).
 - (i) To outlet concentration less than or equal to 20 ppmv as TOC and less than or equal to 20 ppmv as hydrogen halides and halogens;
 - (ii) By a flare that meets the requirements of 40 CFR 63.11(b);
 - (iii) By a control device specified in 40 CFR 63.1257(a)(4); or
 - (iv) In accordance with the alternative standard specified in Condition D.9.6(c).
 - (2) (A) Actual HAP emissions from the sum of all process vents within a process must not exceed 900 kilograms (kg) in any 365-day period.
 - (B) Actual HAP emissions from the sum of all process vents within processes complying with Condition D.9.6(a)(2)(A) are limited to a maximum of 1,800 kg in any 365-day period.
 - (C) Emissions from vents that are subject to the requirements of Condition D.9.6(a)(3) of this section and emissions from vents that are controlled in accordance with the procedures in Condition D.9.6(c) may be excluded from the sums calculated in Conditions D.9.6(a)(2)(A) and (B) of this section.
 - (D) The Permittee may switch from compliance with Condition D.9.6(a)(2) to compliance with Condition D.9.6(a)(1) only after at least 1 year of operation in compliance with Condition D.9.6(a)(2). Notification of such a change in the compliance method shall be reported according to the procedures in 40 CFR 63.1260(h).
- (3) (A) Except as provided in Condition D.9.6(a)(3)(B), uncontrolled HAP emissions from a process vent must be reduced by 98 percent or in accordance with any of the procedures in Conditions D.9.6(a)(1)(B)(i) through (iv) if the uncontrolled HAP emissions from the exceed 25 tons per year, and the flow-weighted average flowrate (FR_a) calculated using Equation 1 is less than or equal to the flowrate index (FRI) calculated using Equation 2.

$$FR_a = \frac{\sum_{i=1}^n (D_i) (FR_i)}{\sum_{i=1}^n (D_i)} \quad (\text{Equation 1})$$

$$FRI = 0.02 * (HL) - 1,000 \quad (\text{Equation 2})$$

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
 FRI = flowrate index, scfm
 HL = annual uncontrolled HAP emissions, lb/yr, as defined in 40 CFR 63.1251

- (B) As an alternative to the requirements in Conditions D.9.6(a)(3)(A), the Permittee may comply with the provisions in Conditions D.9.6(a)(3)(B)(i), (ii) or (iii), if applicable.
- (i) If the Permittee can demonstrate that a process vent is controlled by a control device meeting the criteria specified in Condition D.9.6(a)(3)(B)(i)(1) of this section, then the control device is required to be operated according to Conditions D.9.6(a)(3)(B)(i)(2), (3) and (4) of this section:
- (1) The control device was installed on any process vent that met the Conditions of D.9.6(a)(3)(A) on or before April 2, 1997, and was operated to reduce uncontrolled emissions of total HAP by greater than or equal to 93 percent by weight, but less than 98 percent by weight;
- (2) The device must be operated to reduce inlet emissions of total HAP by 93 percent or by the percent reduction specified for that control device in any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under Title I (including Parts C or D) of the Clean Air Act, whichever is greater;
- (3) The device must be replaced or upgraded to achieve at least 98 percent reduction of HAP or meet any of the conditions specified in Conditions D.9.6(a)(1)(B)(i) through (iv) of this section upon reconstruction or replacement;
- (4) The device must be replaced or upgraded to achieve at least 98 percent reduction of HAP or meet any of the conditions specified in Conditions D.9.6(a)(1)(B)(i) through (iv) of this section by April 2, 2007, or 15 years after issuance of the preconstruction permit, whichever is later.
- (ii) If a process meets all of the conditions specified in Condition D.9.6(a)(3)(B)(ii)(1) through (3), the required level of control for the process is the level that was achieved on or before April 2, 1997. This level of control is demonstrated using the same procedures that are used to demonstrate compliance with Condition D.9.6(a)(1) of this section.

- (1) At least one vent in the process met the conditions of Condition D.9.6(a)(3)(A) of this section on or before April 2, 1997; and
 - (2) The overall control for the process on or before April 2, 1997 was greater than or equal to 93 percent by weight, but less than 98 percent by weight; and
 - (3) The production-indexed HAP consumption factor for the 12-month period in which the process was operated prior to the compliance date is less than one-half of the 3-year average baseline value established no earlier than the 1987 through 1989 calendar years.
- (iii) Processes meeting the conditions of Conditions D.9.6(a)(3)(B)(iii)(1) through (3) of this section are required to be operated to maintain the level of control achieved on or before April 2, 1997. For all other processes meeting Condition D.9.6(a)(3)(B)(iii)(3), uncontrolled HAP emissions from the sum of all process vents within the process must be reduced by 95 percent or greater by weight.
 - (1) Processes containing a process vent that met Conditions D.9.6(a)(3)(A) on or before April 2, 1997; and
 - (2) Processes that are controlled to greater than or equal to 93 percent by weight, but less than 98 percent by weight; and
 - (3) Processes with hydrogenation vent that, in conjunction with all other process vents from the process that do not meet Conditions D.9.6(a)(3)(A) of this section, cannot meet the requirements of Condition D.9.6(a)(1) or (2).
- (4) For each PMPU that is controlled with a CCCD, the Permittee must comply with the provisions specified in either Condition D.9.6(a)(4)(A), (B), or (C) during periods of planned routine maintenance of the CCCD. The Permittee is not required to comply with the same provision for all of the PMPU's controlled by the CCCD.
 - (A) Shutdown the affected process.
 - (B) Comply with the requirements of Conditions D.9.6(a)(1) through (3) by using other means.
 - (C) For a non-dedicated PMPU, implement the procedures described in Conditions D.9.6(a)(4)(C)(i) through (iii) for those process vents that are normally controlled by the CCCD. This option is not available for process vents from dedicated PMPU's.
 - (i) If the Permittee uses a CCCD to comply with the 93 percent reduction requirement in Condition D.9.6(a)(1)(A) or (B), the outlet concentration limit in Condition D.9.6(a)(1)(B)(i), the alternative standard as specified in Conditions D.9.6(a)(1)(B)(iv) and D.9.6(a)(2), implement the provisions in 40 CFR 63.1252(h) during planned routine maintenance of the CCCD.
 - (ii) If the Permittee reduces HAP emissions from process vents by using a CCCD that is also a control device specified in 40 CFR 63.1257(a)(4), implement the provisions in 40 CFR 63.1252(h) during planned routine maintenance of the CCCD.

- (iii) If the Permittee uses a CCCC to reduce emissions from a process vent subject to Condition D.9.6(a)(3), implement the planned routine maintenance provisions in 40 CFR 63.1252(h) for that vent that only if the reason it cannot be performed at a time when the vent subject to Condition D.9.6(a)(3) is not operating, has been described in the Notification of Compliance Status Report or a periodic report submitted before planned routine maintenance event.
- (b) (1) Except as provided in Condition D.9.6(b)(2), uncontrolled HAP emissions from the sum of all process vents within a process at a new affected source shall be reduced by 98 percent or greater by weight or controlled in accordance with any of the requirements of Conditions D.9.6(a)(1)(B)(i) through (iv). Initial compliance with the required emission limit or reduction is demonstrated in accordance with the initial compliance procedures in 40 CFR 63.1257(d), and continuous compliance is demonstrated in accordance with the monitoring requirements described in 40 CFR 63.1258.
- (2) The actual HAP emissions from the sum of all process vents for which the Permittee is not complying with Condition D.9.6(b)(1) are limited to 900 kg in any 365-day period.
- (c) As an alternative standard, the Permittee of an existing or new affected source may comply with the process vent standards by routing vents from a process to a combination control device achieving an outlet TOC concentrations, as calibrated on methane or the predominant HAP, of 20 ppmv or less, and an outlet concentration of hydrogen halides and halogens of 20 ppmv or less. If the owner or operator is routing emissions to a noncombustion control device, it must achieve an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 50 ppmv or less, and an outlet concentration of hydrogen halides and halogens of 50 ppmv or less. Any process vents within a process that are not routed to this control device must be controlled in accordance with the provisions of Condition D.9.6(a) or (b), as applicable. Initial compliance with the outlet concentrations is demonstrated in accordance with the initial compliance procedures described in 40 CFR 63.1257(d)(1)(iv) and continuous compliance is demonstrated in accordance with the emission monitoring requirements described in 40 CFR 63.1258(b)(5).

D.9.7 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

- (a) PM₁₀ emissions from the spray dryer baghouse exhaust shall not exceed 2.35 lb/hr.
- (b) PM_{2.5} emissions from the spray dryer baghouse exhaust shall not exceed 1.25 lb/hr.

Compliance with these emission limits along with the PM₁₀ and PM_{2.5} emissions from the packaging system and the net change of emissions from Plant 27, Plant 29, Plant 38 and Plant 41 will ensure the potential to emit PM₁₀ is less than 15 tons and PM_{2.5} is less than 10 tons per year and will render the requirements of 326 IAC 2-2, not applicable to Significant Source Modification 097-30723-00315 for PM₁₀ and PM_{2.5}.

Compliance Determination Requirements

D.9.8 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to ensure compliance with Condition D.9.5, the baghouses used for particulate control shall be in operation and control emissions from the packaging facilities at all times that the packaging facilities are in operation.
- (b) In order to ensure compliance with Condition D.9.7, the baghouse used for particulate control shall be in operation and control emissions from the spray dryer operation at all times this facility is in operation.

- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.9.9 Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-6(6)]

- (a) In order to demonstrate the compliance status with Condition D.9.5 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform PM testing on the spray dryer dust collector exhaust, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The PM emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) In order to demonstrate the compliance status with Condition D.9.7(a) and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform PM₁₀ testing on the spray dryer dust collector exhaust, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The PM₁₀ emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (c) In order to demonstrate the compliance status with Condition D.9.7(b) and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform PM_{2.5} testing on the spray dryer dust collector exhaust, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The PM_{2.5} emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.9.10 HAP Minor Limit [40 CFR 63]

- (a) Whenever the reactor is in operation at Plant 41, the Permittee shall operate the incinerator identified as HN013.
- (b) Total HAP emissions from the Plant 41 thermal oxidizer shall not exceed 1.40 lb/hr.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.11 Visible Emissions Notations

- (a) Visible emission notations of the packaging facility constructed in 1967 stack exhausts and the spray drying process baghouse exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.9.12 Parametric Monitoring

- (a)
 - (1) In order to demonstrate the compliance status with Condition D.9.5, the Permittee shall record the gas flow rate across the baghouse used in conjunction with the packaging facilities known as the downstairs collector, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the flow rate across the baghouse is outside of the normal operating range, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A flow rate that is outside the above normal operating range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
 - (2) In order to demonstrate the compliance status with Condition D.9.5, the Permittee shall record the gas flow rate across the baghouse used in conjunction with the packaging facilities known as the MAC dust collector, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the flow rate across the baghouse is outside of the normal operating range, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A flow rate that is outside the above normal operating range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) In order to demonstrate the compliance status with Condition D.9.5 and Condition D.9.7, the Permittee shall record the pressure drop across the baghouse used in conjunction with the spray dryer, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside of the manufacturer's recommended range, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months.

D.9.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.14 Record Keeping Requirements for 40 CFR 63, Subpart GGG [40 CFR63.1259]

Pursuant to 40 CFR 63.1259, the Permittee shall keep the following records:

- (a) The Permittee shall develop and implement a written startup, shutdown and malfunction plan as specified in 40 CFR 63.6(e)(3). This plan shall describe in detail procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program for corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with 40 CFR 63, Subpart GGG. Current and superseded versions shall be kept onsite. The Permittee shall keep startup, shutdown and malfunction records.
 - (1) The Permittee shall record the occurrence and duration of each malfunction of the process operations or of air pollution control equipment used to comply with 40 CFR 63, Subpart GGG.
 - (2) The Permittee shall record the occurrence and duration of each malfunction of continuous monitoring systems used to comply with this subpart.
 - (3) For each startup, shutdown, or malfunction, the Permittee shall record all information necessary to demonstrate that the procedures specified in the affected source's startup, shutdown, and malfunction plan were followed. Alternatively, the Permittee shall record any actions taken that are not consistent with the plan.
- (b) If the Permittee elects to install a continuous monitoring system, the Permittee shall maintain the records specified in 40 CFR 63.10(c)(1) through (14).
- (c) The Permittee must keep the following records up-to-date:
 - (1) Each measurements of a control device operating parameter monitored in accordance with 40 CFR 63.1258 and each measurement of a treatment process parameter monitored in accordance with 40 CFR 63.1258(g)(2) and (3).
 - (2) For processes subject to 40 CFR 63.1252(e), records of consumption, production, and the rolling average values of the production-indexed HAP and VOC consumption factors.
 - (3) For each continuous monitoring system used to comply with 40 CFR 63, Subpart GGG, records documenting the completion of calibration checks and maintenance of continuous monitoring systems.
 - (4) For purposes of compliance with the annual mass limits of 40 CFR 63.1254(a)(2) and (b)(2), daily records of the rolling annual total emissions.
 - (5) For processes that are in compliance with the percent reduction requirements of 40 CFR 63.1254(a)(1) or (b)(1) and that contain vents controlled to less than the percent reduction requirement, the following records are required:
 - (A) Standard batch uncontrolled and controlled emissions for each process;
 - (B) Actual uncontrolled and controlled emissions for each nonstandard batch; and,
 - (C) A record whether each batch operated was considered a standard batch.

- (6) For processes that are in compliance with annual mass limits of 40 CFR 63.1254(a)(2) or (b)(2), the following records are required:
 - (A) The number of batches per year for each batch process;
 - (B) The operating hours per year for continuous processes;
 - (C) Standard batch uncontrolled and controlled emissions for each process;
 - (D) Actual controlled emissions for each batch operated during periods of planned routine maintenance of a CCGD, calculated according to 40 CFR 63.1258(c);
 - (E) Actual uncontrolled and controlled emissions for each nonstandard batch; and,
 - (F) A record whether each batch operated was considered a standard batch.
 - (7) Number of storage tank turnovers per year, if used in an emissions average.
 - (8) A schedule or log of each operating scenario updated daily or, at a minimum, each time a different operating scenario is put into operation.
 - (9) Description of worst-case operating conditions.
 - (10) Periods of planned routine maintenance.
 - (11) If the Permittee elects to comply with 40 CFR 63.1253(b) or (c) by installing a floating roof, the Permittee must keep records of each inspection and seal gap measurement.
 - (12) If the Permittee elects to comply with the vapor balancing alternative in 40 CFR 63.1253(f), the Permittee must keep records of the DOT certification and the pressure relief vent setting and the leak detection records.
 - (13) All maintenance performed on the air pollution control equipment.
- (d) The Permittee shall keep records of each operating scenario which demonstrated compliance with 40 CFR63, Subpart GGG.
 - (e) If the Permittee chooses to comply with 40 CFR 63.1252(d), all records shall be kept in accordance with 40 CFR 63.1259(e).
 - (f) Documentation of a decision to use a delay of repair due to unavailability of parts, shall include a description of the failure, the reason additional time was necessary, and the date when the repair was completed.
 - (g) If the Permittee transfers an affected wastewater stream or residual removed from an affected wastewater stream in accordance with 40 CFR 63.1256(a)(5) the Permittee shall keep a record of the notice sent to the treatment operator stating that the wastewater stream or residual contains organic HAP which are required to be managed and treated in accordance with 40 CFR 63, Subpart GGG.
 - (h) The Permittee shall keep documentation of a decision to use an extension, as specified in 40 CFR 63.1256(b)(6)(ii) or (b)(9), in a readily accessible location. The documentation shall include a description of the failure, documentation that alternate storage capacity is unavailable, and specification of a schedule of actions that will ensure that the control equipment will be repaired and the tank will be emptied as soon as practical.

- (i) The Permittee shall keep the following records concerning inspections:
- (1) A record that each waste management unit inspection required by 40 CFR 63.1256(b) through (f) was performed.
 - (2) A record that each inspection for control devices required by 40 CFR 63.1256(h) was performed.
 - (3) A record of the results of each seal gap measurement required by 40 CFR 63.1256(b)(5) and (f)(3). The records shall include the date of measurement, the raw data obtained in the measurement, and the required calculations.
 - (4) Records identifying all parts of the vapor collection system, closed-vent system, fixed roof, cover, or enclosure that are designated as unsafe-to-inspect or difficult-to-inspect with an explanation of why the equipment is unsafe-to-inspect or difficult-to-inspect, and the plan for inspecting the equipment.
 - (5) 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 following information:
 - (A) Hourly records of whether the flow indicator specified under §63.1252(b)(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.
 - (B) Where a seal mechanism is used to comply with §63.1252(b)(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.
 - (6) For each inspection conducted in accordance with §63.1258(h)(2) and (3), a record of the information specified in 40 CFR 63.1259(i)(7), (8), and (9).
- (j) Records relating to leak detection and repair shall be kept in accordance with 40 CFR 63.1255(g).

D.9.15 Record Keeping Requirements

- (a) In order to document the compliance status with Condition D.9.11, the Permittee shall maintain a daily record of visible emission notations of the packaging facilities constructed in 1967 stack exhausts and the spray dryer operation exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) In order to document the compliance status with Condition D.9.12, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the packaging facilities constructed in 1967. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.9.16 Reporting Requirements [40 CFR 63.1260]

Pursuant to 40 CFR 63.1260, the Permittee shall comply with the following reporting requirements:

- (a) The Permittee shall submit periodic reports in accordance with the conditions listed below:
 - (1) The Permittee shall submit semiannual periodic reports. The first report shall be submitted no later than 240 days after the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Each subsequent report shall cover the 6-month period following the preceding period.

- (2) Quarterly reports shall be submitted when the source experiences an exceedance of a temperature limit monitored according to the provisions of 40 CFR 63.11258(b)(1)(iii) or an exceedance of the outlet concentration monitored according to the provisions of 40 CFR 63.1258(b)(1)(x) or (b)(5). Once an exceedance occurs, the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency is approved.
- (3) When a new operating scenario has been operated since the last periodic report, quarterly reports shall be submitted.
- (4) Each periodic report must include the following information:
 - (A) Information as required under 40 CFR 63.10(e)(3)(vi)(A) through (I) and (K) through (M). For each continuous monitoring system, the report must also include information in 40 CFR 63.10(e)(3)(vi)(J).
 - (B) 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 of the reporting period is 5 percent or greater of the total operating time for the reporting period, the report must include the following information:
 - (1) 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 report.
 - (2) Duration of excursions, as defined in 40 CFR 63.1258(b)(7)
 - (3) 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.
 - (4) When a continuous monitoring system is used, the information required in 40 CFR 63.10(c)(5) through (13).
 - (C) For each inspection conducted in accordance with 40 CFR 63.1258(h)(2) or (3) during which a leak is detected, the records specified in 40 CFR 63.1259(i)(7) must be included in the next periodic report.
 - (D) For each vapor collection system or closed vent system with a bypass line subject to 40 CFR 63.1252(b)(1), records required under 40 CFR 63.1259(i)(6)(i) 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 40 CFR 63.1252(b)(2), records required under 40 CFR 63.1259(i)(6)(ii) 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.
 - (E) The following information shall be stated in the periodic report, when applicable:
 - (1) No excess emissions.
 - (2) No exceedances of a parameter.
 - (3) No excursions.

- (4) No continuous monitoring system has been inoperative, out of control, repaired or adjusted.
- (F) The following information for periods of planned routine maintenance:
 - (1) For each storage tank subject to control requirements, periods of planned routine maintenance during which the control device does not meet the specifications of 40 CFR 63.1253(b) through (d).
 - (2) For a CCCD subject to 40 CFR 63.1252(h), periods of planned routine maintenance during the current reporting period and anticipated periods of planned routine maintenance during the next reporting period.
 - (3) Rationale for why planned routine maintenance of a CCCD subject to 40 CFR 63.1252(h) must be performed while a process with a vent subject to 40 CFR 63.1254(a)(3) will be operating, if applicable. This requirement applies only if the rationale is not in, or differs from that in, the Notification of Compliance Status report.
- (G) Each new operating scenario which has been operated since the time period covered by the last periodic report. For each new operating scenario, the Permittee shall provide verification that the operating conditions for any associated control or treatment device have not been exceeded, and that any required calculations and engineering analyses have been performed. For the initial periodic report, each operating scenario for each process operated since the due date of the Notification of Compliance State Report shall be submitted.
- (H) If the Permittee elects to comply with the provisions of 40 CFR 63.1253(b) or (c) by installing a floating roof, the Permittee shall submit the information specified in 40 CFR 63.122(d) through (f) as applicable.
- (b) The Permittee must submit a report 60 days before the scheduled implementation date of either any change in the activity covered by the precompliance report or a change in the status of a control device from small to large.
- (c) Whenever a process change is made or there is a change in any of the information submitted in the Notification of Compliance Status Report (other than those changes covered in Condition D.9.9(b) above), the Permittee shall submit the following information with the next Periodic report:
 - (1) A brief description of the process change;
 - (2) A description of any modifications to standard procedures or quality assurance procedures;
 - (3) Revisions to any of the information reported in the original Notification of Compliance Status Report;
 - (4) Information required by the Notification of Compliance Status Report for changes involving the addition of processes or equipment.
- (d) The Permittee shall prepare startup, shutdown, and malfunction reports as outlined in 40 CFR 63.1260(i).
- (e) Reporting relating to leak detection and repair shall be conducted in accordance with 40 CFR 63.1255(h).

- (f) If the Permittee chooses to comply with the requirements of 40 CFR 63.1252(d), they shall submit the implementation plan described in 40 CFR 63.1259(e) 6 months prior to the compliance date of the standard and the following information in the Periodic reports:
- (1) The records specified in 40 CFR 63.1259(e) for each process or storage tank included in the emissions average;
 - (2) All information as specified in Condition D.9.9(a) for each process or storage tank included in the emissions average;
 - (3) Any changes of the processes or storage tanks included in the average.
 - (4) The calculation of the overall percent reduction efficiency for the reporting period.
 - (5) Changes to the Implementation Plan which affect the calculation methodology of uncontrolled or controlled emissions or the hazard or risk equivalency determination.
 - (6) Every second semiannual or fourth quarterly report, as appropriate, shall include the results according to 40 CFR 63.1259(e)(4) to demonstrate that the emissions averaging provisions of 40 CFR 63.1252(d), 40 CFR 63.1257(g) and (h), 40 CFR 63.1258(f), and 40 CFR 63.1259(f) are satisfied.
- (g) The Permittee shall notify the Administrator of the planned date of a performance test at least 60 days before the test in accordance with 40 CFR 63.7(b). The Permittee also must submit the test plan and the emission profile with the notification of the performance test.

SECTION D.10 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (e) Cold cleaning operations with potential emissions of less than three (3) pounds per hour (lbs/hr) or fifteen (15) pounds per day (lbs/day) of VOC.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Cold Cleaner Degreaser Operations and Control [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), the owner or operator of a cold cleaning facility shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operating requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Part 70 Permit No.: T097-27757-00315

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Part 70 Permit No.: T097-27757-00315

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
 Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
 Part 70 Permit No.: T097-27757-00315
 Facility: Entire Source
 Parameter: Single HAP and Total HAP Emissions
 Limit: Less than 10 tons single HAP and less than 25 Tons total HAP per twelve consecutive month period.

QUARTER : _____ YEAR: _____

Month 1		Column 1	Column 2	Column 1 + Column 2
Plant	Pollutant	Total This Month	Previous 11 Months	12 Month Total
27	Single HAP			
	Total HAP			
29	Single HAP			
	Total HAP			
38	Single HAP			
	Total HAP			
40	Single HAP			
	Total HAP			
41	Single HAP			
	Total HAP			
47	Single HAP			
	Total HAP			
48	Single HAP			
	Total HAP			
49	Single HAP			
	Total HAP			

Annual Methanol Emissions _____

Annual Total HAP Emissions _____

Month 2		Column 1	Column 2	Column 1 + Column 2
Plant	Pollutant	Total This Month	Previous 11 Months	12 Month Total
27	Single HAP			
	Total HAP			
29	Single HAP			
	Total HAP			
38	Single HAP			
	Total HAP			
40	Single HAP			
	Total HAP			
41	Single HAP			
	Total HAP			
47	Single HAP			
	Total HAP			
48	Single HAP			
	Total HAP			
49	Single HAP			
	Total HAP			

Annual Methanol Emissions _____

Annual Total HAP Emissions _____

Month 3		Column 1	Column 2	Column 1 + Column 2
Plant	Pollutant	Total This Month	Previous 11 Months	12 Month Total
27	Single HAP			
	Total HAP			
29	Single HAP			
	Total HAP			
38	Single HAP			
	Total HAP			
40	Single HAP			
	Total HAP			
41	Single HAP			
	Total HAP			
47	Single HAP			
	Total HAP			
48	Single HAP			
	Total HAP			
49	Single HAP			
	Total HAP			

Annual Methanol Emissions _____

Annual Total HAP Emissions _____

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Part 70 Permit No.: T097-27757-00315
Facility: Boiler CB-70K
Parameter: Distillate fuel oil and fuel oil equivalents
Limit: 1,124 kgal of distillate fuel oil and fuel oil equivalents

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

Note: For the purposes of determining compliance, burning 1 MMCF of natural gas in Boiler CB-70K is equivalent to burning 1.41 kgallons of distillate fuel oil.

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
 Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
 Part 70 Permit No.: T097-27757-00315
 Facility: Plant 48
 Parameter: VOC (Permit Condition D.8.2)
 Limit: 40 ton/yr for Plant 48

Plant 48 VOC Emissions are calculated using the following formula:

$$E_{VOC48} = W_{VOC48u} + \sum [W_{VOC48c} * (1 - C_{eff})]$$

Where: E_{VOC48} = the monthly VOC emissions from Plant 48;
 W_{VOC48u} = the monthly Plant 48 VOC emissions when operating without control; and
 C_{eff} = scrubber ST-14 control efficiency for each process.

QUARTER : _____

YEAR: _____

Plant 48 (VOC Emissions)

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Part 70 Permit No.: T097-27757-00315
Facility: Iron Oxide Storage Silo
Parameter: Iron Oxide Throughput
Limit: 15,768 tons per twelve consecutive month period

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
 Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
 Part 70 Permit No.: T097-27757-00315

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Significant Permit
Modification**

Source Description and Location

Source Name:	Vertellus Agriculture & Nutrition Specialties, LLC
Source Location:	1500 South Tibbs Avenue Indianapolis, Indiana 46241
County:	Marion County
SIC Code:	2869, 2899
Operation Permit No.:	T 097-27757-00315
Operation Permit Issuance Date:	January 30, 2012
Significant Permit Modification No.:	097-32214-00315
Permit Reviewer:	Ghassan Shalabi

Existing Approvals

The source was issued Part 70 Operating Permit No. T097-27757-00315 on January 30, 2012. The source has not received any other approvals since then.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O ₃	Attainment effective November 8, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.	

- (a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx

emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM2.5**
 Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**
 Marion County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a chemical process plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)
PM	< 100
PM ₁₀	< 100
PM _{2.5}	< 100
SO ₂	> 100
VOC	> 100
CO	> 100
NO _x	> 100
GHGs	> 100,000
Single HAP	< 10
Total HAP	< 25

- (a) This existing stationary source is major for PSD because the emissions of SO2, VOC, CO and NOx, are greater than one hundred (> 100) tons per year, and emissions of GHGs are greater than one hundred thousand (> 100,000) tons of CO₂ equivalent emissions (CO₂e) per year, and it is in one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is major for nonattainment NSR for PM2.5 even though the emissions of the nonattainment pollutant PM2.5 are less than one hundred (100) tons per year because the NOx and SO2 emissions are greater than one hundred (100) tons per year. NOx and SO2 are precursors for PM2.5. The source is one of the twenty-eight (28) listed source categories.
- (c) These emissions are based upon Part 70 Operating Permit First Renewal issued on January 30, 2012.

This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Vertellus Agriculture & Nutrition Specialties, LLC on August 16, 2012, relating to changing the Parametric Monitoring condition of the baghouse controlling the packaging facility and the Testing conditions of the baghouse controlling the Iron Oxide storage system.

Enforcement Issues

There are no pending enforcement actions.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

There is no physical modification or change in the method of operation associated with this modification; therefore, this modification is not subject to the source modification requirements under 326 IAC 2-7-10.5. The changes will be incorporated into the permit as a Significant Permit Modification under 326 IAC 2-7-12(d)(1), because it is a significant change to a monitoring and testing conditions .

Permit Level Determination – PSD or Emission Offset or Nonattainment NSR

This modification to an existing major stationary source is not major; because, there is no increase in the potential to emit of any emission unit. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply to this modification.

Federal Rule Applicability Determination

There are no changes to Federal Rule Applicability as a result of this modification.

State Rule Applicability Determination

There are no changes to State Rule Applicability as a result of this modification.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination

Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Determination Requirements

There are no changes to the Compliance Determination Requirements as a result of this modification.

Compliance Monitoring Requirements

There are no changes to the Compliance Monitoring Requirements as a result of this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T097-27757-00315. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change 1: Vertellus decided that the flow rate across the baghouse is a better indicator of the filter failure in the multi compartment unit. Also, the baghouses can operate independently. Therefore, Condition D.9.12 is changed as follows:

D.9.12 Parametric Monitoring

- (a) (1) In order to demonstrate the compliance status with Condition D.9.5, the Permittee shall record the **gas flow rate** ~~pressure drop~~ across the baghouse used in conjunction with the packaging facilities **known as the downstairs collector** ~~constructed in 1967~~, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the **flow rate** ~~pressure drop~~ across the baghouse is outside of the ~~manufacturer's recommended~~ **normal operating** range, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A ~~pressure-reading~~ **flow rate** that is outside the above **normal operating** ~~mentioned~~ range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (2) **In order to demonstrate the compliance status with Condition D.9.5, the Permittee shall record the gas flow rate across the baghouse used in conjunction with the packaging facilities known as the MAC dust collector, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the flow rate across the baghouse is outside of the normal operating range, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A flow rate that is outside the above normal operating range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**

...

Change 2: The baghouse controlling the storage of iron oxide is only used for approximately one hour each month while material is being loaded in the storage silo. Therefore, the testing requirements for this Silo are deleted as follows:

D.8.7 Testing Requirements (326 IAC 2-7-6(1),(6)) [326 IAC 2-1.1-11]

- (a) In order to demonstrate the compliance status with Condition D.8.1, the Permittee shall conduct a performance test of the Plant 48 scrubber identified as AS-14 to verify its control efficiency for VOC and HAP for each process using the scrubber as control, utilizing methods as approved by the IDEM Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration or if there is a change to the process resulting in increased emissions. If the scrubber is not in operation five (5) years after the last compliance demonstration, the performance test shall be completed within 180 days after restarting operation of scrubber AS-14. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.
- ~~(b) In order to demonstrate the compliance status with Condition D.8.2 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform PM₁₀ testing on the exhaust of the baghouse controlling emissions from the iron oxide storage system, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The PM₁₀ emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM₁₀ contains filterable and condensable particulate matter.~~
- ~~(c) In order to demonstrate the compliance status with Condition D.8.2 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform PM_{2.5} testing on the exhaust of the baghouse controlling emissions from the iron oxide storage system, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The PM_{2.5} emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.~~
- ~~(d) In order to demonstrate the compliance status with Condition D.8.3 and D.8.5 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform PM testing on the exhaust of the baghouse controlling emissions from the iron oxide storage system, utilizing methods approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The PM emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.~~
- (eb) In order to demonstrate the compliance status with Condition D.8.4 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform total HAP testing on the scrubber exhaust controlling emissions from the Chlorination Reactor and 2,3-DCP Crude Reactor, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The total HAP emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.
- (fc) In order to demonstrate the compliance status with Condition D.8.4 and within sixty (60)

days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup, the Permittee shall perform methanol testing on the Plant 48 Reactor Vent, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). The Methanol emission rate shall be determined after the control device. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Change 3: To clarify the description of the emission units in A.2, the permit is changed as follows:

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

...

(k) Plant 38 used to manufacture precursors to various grades of vitamin B-3.

(1) One (1) B-3 production unit, constructed in 1967, including the following emission units:

...

(D) One (1) packaging facility consisting of the following:

...

(iii) One pick-up collector (known as central vac), installed in 1997, with a maximum operating capacity of 150 pounds per hour. This unit exhausts at stack S-28-003.

~~And controlled by the following two (2) baghouses:~~

(iv) Micro Pul (known as the downstairs collector), installed in 1991, with a maximum operating capacity of 670 pounds per hour, exhausting at stack S-28-004, and

(~~iv~~) Penthouse collector (known as the MAC dust collector), installed in 2000, with a maximum operating capacity of 1,500 pounds per hour, exhausting at stack S-28-001.

...

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Ghassan Shalabi at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at 317-234-5378 or toll free at 1-800-451-6027 extension 4-5378.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: James Gross
Vertellus Agriculture & Nutrition Specialties LLC
1500 S Tibbs Ave
Indianapolis, IN 46241

DATE: February 7, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V - Significant Permit Modification
097 - 32214 - 00315

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Brian Bence, Site Dir
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Governor

Thomas W. Easterly
Commissioner

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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

February 7, 2013

TO: West Indianapolis Library Branch

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Vertellus Agriculture & Nutrition Specialties LLC
Permit Number: 097 - 32214 - 00315

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: February 7, 2013

RE: Vertellus Agriculture & Nutrition Specialties LLC / 097 - 32214 - 00315

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

Mail Code 61-53

IDEM Staff	LPOGOST 2/7/2013 Vertellus Agriculture & Nutrition Specialties, LLC 097 - 32214 - 00315 final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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2		Brian Bence Site Dir Vertellus Agriculture & Nutrition Specialties, LLC 1500 S Tibbs Ave indianapolis IN 46241 (RO CAATS)									
3		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 (Health Department)									
4		West Indianapolis Library Branch 1216 South Kappes St. Indianapolis IN 46221 (Library)									
5		Indianapolis City Council and Mayors Office 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official)									
6		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official)									
7		Matt Mosier Office of Sustainability 1200 S Madison Ave #200 Indianapolis IN 46225 (Local Official)									
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