Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
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Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Signficant Modification to a
Part 70 Operating Permit

for Reclaimed Energy, Division of Superior Oil Company, Inc. in Fayette County

Significant Permit Modification No.: 041-36969-00015

The Indiana Department of Environmental Management (IDEM) has received an application from Reclaimed Energy, Division of Superior Oil Company, Inc., located at 1500 Western Avenue, Connersville, Indiana 47331, for a significant modification of its Part 70 Operating Permit Renewal issued on September 19, 2016. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Reclaimed Energy, Division of Superior Oil Company, Inc. to make certain changes at its existing source. Reclaimed Energy Division of Superior Oil Company, Inc. has applied to update the equipment leak NESHAP reference as required by NESHAP 40 CFR 63, Subpart DD, the subpart was recently revised to now reference NESHAP 40 CFR 63, Subpart H, instead of NESHAP 40 CFR 63 Subpart V for equipment leaks from applicable equipment.

This draft Significant Permit Modification does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Fayette County Public Library
828 Grand Avenue
Connersville, IN 47331

and

IDEM Southeast Regional Office
820 West Sweet Street
Brownstown, IN 47220-9557

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPM 041-36969-00015 in all correspondence.

Comments should be sent to:

Nicholas Eilerman
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5373
Or dial directly: (317) 234-5373
Fax: (317) 232-6749 attn: Nicholas Eilerman
E-mail: neilerman@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Nicholas Eilerman of my staff at the above address.

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

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DRAFT

Ms. Cobb
Reclaimed Energy, Division of Superior Oil Company, Inc.
1500 Western Avenue
Connersville, IN 47331

Re: 041-36969-00015
Significant Permit Modification to
Part 70 Renewal No.: T041-32531-00015

Dear Ms. Cobb:

Reclaimed Energy, Division of Superior Oil Company, Inc. was issued Part 70 Operating Permit Renewal No. T041-32531-00015 on September 16, 2013 for a stationary chemical recyclying source located at 1500 Western Ave, Connersville, IN 47331. An application requesting changes to this permit was received on March 18, 2016. 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.

Please find attached the entire Part 70 Operating Permit as modified, including the following new and revised attachments:

Attachment A: 40 CFR 63, Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks
Attachment B: 40 CFR 63, Subpart DD - National Emission Standards for hazardous Air Pollutants from Off-Site Waste and Recovery Operations

The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment C: 40 CFR 63, Subpart OO, National Emission Standards for Hazardous Air Pollutants for Tanks--- Level 1
Attachment D: 40 CFR 63, Subpart PP, National Emission Standards for Hazardous Air Pollutants for Containers
Attachment E: 40 CFR 264, Subpart AA, Standards for Owners and Operators of TSDF Hazardous Air Pollutants for Process Vents
Attachment F: 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to

the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

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 Nicholas Eilerman, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-234-5373 or 1-800-451-6027, and ask for extension 4-5373.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - Fayette County
Fayette County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Southeast Regional Office

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Reclaimed Energy, Division of Superior Oil Company, Inc.
1500 Western Avenue
Connersville, Indiana 47331

(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.

Operation Permit No.: T 041-32531-00015	
Issued by: Original Signed by Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 16, 2013 Expiration Date: September 16, 2018

Significant Permit Modification No. 041-35135-00015, issued on May 14, 2015
Significant Permit Modification No. 041-36231-00015, issued on February 11, 2016.

Significant Permit Modification Permit No.: 041-36969-00015	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: September 16, 2018

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Attachment C: 40 CFR 63 Subpart OO - National Emission Standards for Hazardous Air Pollutants for Tanks—Level 1

Attachment D: 40 CFR 63 Subpart PP - National Emission Standards for Hazardous Air Pollutants for CONTAINERS

Attachment E: 40 CFR 264 Subpart AA - Standards for Owners and Operators of TSDF Hazardous Air Pollutants for PROCESS VENTS

Attachment F: 40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

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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.2 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(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary waste management operation that receives offsite materials and the operation is regulated as a hazardous waste treatment, storage, and disposal facility (TSDF).

Source Address:	1500 Western Avenue, Connersville, Indiana 47331
General Source Phone Number:	(765) 825-7101
SIC Code:	7389 (Business Services, Not Elsewhere Classified), 2869 (Industrial Organic Chemicals, Not Elsewhere Classified)
County Location:	Fayette
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 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(14)]

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

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of

solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(h) One (1) mixed solvent (molecular sieve) dryer, identified as MS 1, installed in 1995, capacity: 6,500 gallons per batch, one (1) batch per 13.5 hours, with condenser recovery system for startup, no control, exhausted through Stack MS1.

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under NESHAPs 40 CFR 63, Subparts DD, PP, and H, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(k) One (1) natural gas-fired fire tube boiler, identified as BO 1, installed in 1981, heat input capacity: 25.11 million British thermal units per hour, no control, exhausted through Stack S 1.

Under NESHAP 40 CFR 63, Subpart DDDDD, this is an affected facility

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is an affected facility.

(m) Product storage tanks:

(1) One (1) product storage tank, identified as TK 1, installed in 2012, capacity: 6,500 gallons of volatile organic compounds, no control.

(2) One (1) product storage tank, identified as TK 2, installed in 1981, capacity: 6,800 gallons of volatile organic compounds, no control.

(3) One (1) product storage tank, identified as TK 3, installed in 1983, capacity: 6,000 gallons of volatile organic compounds, no control.

(4) One (1) product storage tank, identified as TK 4, installed in 1983, capacity: 4,500 gallons of volatile organic compounds, no control.

(5) One (1) product storage tank, identified as TK 5, installed in 2004, capacity: 3,000 gallons of volatile organic compounds, no control.

(6) One (1) product storage tank, identified as TK 6, installed in 1985, capacity: 1,000 gallons of volatile organic compounds, no control.

(7) One (1) product storage tank, identified as TK 7, installed in 1985, capacity: 1,550 gallons of volatile organic compounds, no control.

(8) One (1) product storage tank, identified as TK 8, installed in 1985, capacity: 1,550 gallons of volatile organic compounds, no control.

(9) One (1) product storage tank, identified as TK 9, installed in 1990, capacity: 1,800 gallons of volatile organic compounds, no control.

(10) One (1) product storage tank, identified as TK 10, installed in 1990, capacity: 6,500 gallons of volatile organic compounds, no control.

(11) One (1) product storage tank, identified as TK 11, installed in 1990, capacity: 3,000 gallons of volatile organic compounds, no control.

(12) One (1) product storage tank, identified as TK 12, installed in 1990, capacity: 6,500 gallons of volatile organic compounds, no control.

(13) One (1) product storage tank, identified as TK 13, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(14) One (1) product storage tank, identified as TK 14, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(15) One (1) product storage tank, identified as TK 15, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(16) One (1) product storage tank, identified as TK 16, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(17) One (1) product storage tank, identified as TK 17, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(18) One (1) product storage tank, identified as TK 23, installed in 1998, capacity: 2,000 gallons of volatile organic compounds, no control.

(19) One (1) product storage tank, identified as TK 24, installed in 1998, capacity: 2,000 gallons of volatile organic compounds, no control.

(20) One (1) product storage tank, identified as TK 25, installed in 1998, capacity: 2,000 gallons of volatile organic compounds, no control.

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, DD, OO, and H, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(p) One (1) product shipment loading area for containers, bulk tankers and trucks, with a total capacity of 24,090,000 gallons of products per year, no control.

The regenerative thermal oxidizer (RTO) was approved in 2015 for replacement of the catalytic thermal oxidizer.

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) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of the following emission unit:

One (1) natural gas-fired fire tube boiler, installed in 1998, exhausting through Stack S-2, heat input capacity: 8.4 million British thermal units per hour. [326 IAC 6-2]

Under NESHAP 40 CFR 63, Subpart DDDDD, this is an affected facility

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2]

(d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2].

(e) The following operations with emissions below exemption levels in 326 IAC 2-1.1-3 including the following:

(1) Two (2) parts washers, using a methyl pyrrolidone and dibasic ester blend as solvent [326 IAC 8-3-2]

(2) One (1) storage tank for mineral spirits, identified as TK 21, with a storage capacity of 10,000 gallons, no control.

(3) One (1) mixing tank, identified as GM-1, for mixing mineral spirits, gilsonite powder and other compounds, with a maximum capacity of 4400 gallons, no control.

(f) Closed loop heating and cooling systems.

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, T041-32531-00015, 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 13-15-5-3. 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(35), 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(35).

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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 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(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, 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(35).

The Permittee shall implement the PMPs.

(b) 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(35).

(c) 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 or Southeast Regional Office 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
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058**.**

(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

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(35).

(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)(8) 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)]

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 T041-32531-00015 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(35).

(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(42). 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(35).

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(35).

(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) or (c) 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)(1) and (c)(1). 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) and (c)(1).

(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(37)) 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(35).

(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(35).

(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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 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 forty percent (40%) 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.3 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.4 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.5 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.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(35).

(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(35).

(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(35).

(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)]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
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 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, 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(35).

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. The analog instrument shall be capable of measuring values outside of the normal range.

(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(11)][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(35).

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(33) (“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(35).

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

(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. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of this paragraph. 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(35). 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. 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.

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.

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SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a

450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(h) One (1) mixed solvent (molecular sieve) dryer, identified as MS 1, installed in 1995, capacity: 6,500 gallons per batch, one (1) batch per 13.5 hours, with condenser recovery system for startup, no control, exhausted through Stack MS1.

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under NESHAPs 40 CFR 63, Subparts DD, PP, and H, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is an affected facility.

(m) Product storage tanks:

(1) One (1) product storage tank, identified as TK 1, installed in 2012, capacity: 6,500 gallons of volatile organic compounds, no control.

(2) One (1) product storage tank, identified as TK 2, installed in 1981, capacity: 6,800 gallons of volatile organic compounds, no control.

(3) One (1) product storage tank, identified as TK 3, installed in 1983, capacity: 6,000 gallons of volatile organic compounds, no control.

(4) One (1) product storage tank, identified as TK 4, installed in 1983, capacity: 4,500 gallons of volatile organic compounds, no control.

(5) One (1) product storage tank, identified as TK 5, installed in 2004, capacity: 3,000 gallons of volatile organic compounds, no control.

(6) One (1) product storage tank, identified as TK 6, installed in 1985, capacity: 1,000 gallons of volatile organic compounds, no control.

(7) One (1) product storage tank, identified as TK 7, installed in 1985, capacity:

1,550 gallons of volatile organic compounds, no control.

(8) One (1) product storage tank, identified as TK 8, installed in 1985, capacity: 1,550 gallons of volatile organic compounds, no control.

(9) One (1) product storage tank, identified as TK 9, installed in 1990, capacity: 1,800 gallons of volatile organic compounds, no control.

(10) One (1) product storage tank, identified as TK 10, installed in 1990, capacity: 6,500 gallons of volatile organic compounds, no control.

(11) One (1) product storage tank, identified as TK 11, installed in 1990, capacity: 3,000 gallons of volatile organic compounds, no control.

(12) One (1) product storage tank, identified as TK 12, installed in 1990, capacity: 6,500 gallons of volatile organic compounds, no control.

(13) One (1) product storage tank, identified as TK 13, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(14) One (1) product storage tank, identified as TK 14, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(15) One (1) product storage tank, identified as TK 15, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(16) One (1) product storage tank, identified as TK 16, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(17) One (1) product storage tank, identified as TK 17, installed in 1991, capacity: 6,500 gallons of volatile organic compounds, no control.

(18) One (1) product storage tank, identified as TK 23, installed in 1998, capacity: 2,000 gallons of volatile organic compounds, no control.

(19) One (1) product storage tank, identified as TK 24, installed in 1998, capacity: 2,000 gallons of volatile organic compounds, no control.

(20) One (1) product storage tank, identified as TK 25, installed in 1998, capacity: 2,000 gallons of volatile organic compounds, no control.

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, DD, OO, and H, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity:

6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(p) One (1) product shipment loading area for containers, bulk tankers and trucks, with a total capacity of 24,090,000 gallons of products per year, no control.

The regenerative thermal oxidizer (RTO) was approved in 2015 for replacement of the catalytic thermal oxidizer.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New facilities; general reduction requirements), Part 70 Operating Permit No. T041-6719-00015, issued on June 1, 2001, and SPM 041-35135-00015, issued on May 14, 2014:

(a) The regenerative thermal oxidizer is the Best Available Control Technology and shall be operated at all times when any of the following are in operation:

(1) the vacuum distillation unit (VD 1),

(2) the fractionation columns (Col 1 or -Col 2),

(3) the vacuum pump (VP 1),

(4) the pot still 1 (DP 1), or

(5) the thin film evaporators No. 1 (TF 1).

(b) The volatile organic compound (VOC) emissions shall not exceed 58.9 tons per twelve (12) consecutive month period for all facilities equipped with the regenerative thermal oxidizer and other recycling/processing operations, with compliance determined at the end of month.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the Preventive Maintenance Plan required by this condition.

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

D.1.3 Regenerative Thermal Oxidizer Operation

In order to comply with Condition D.1.1,

(a) The regenerative thermal oxidizer shall operate at all times that VD 1, Col 1, Col 2, VP 1, DP1 and TF 1 are operated.

(b) The VOC emissions shall be calculated by the following equation:

VOC emissions = Input VOC *(1- overall control efficiency of the thermal oxidizer)
+ ∑(uncontrolled VOC input * emission factor).

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.1(b), the Permittee shall conduct performance test on the RTO to verify VOC overall control efficiency, no later than one hundred and eighty (180) days after the RTO is installed using methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. 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.

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

D.1.5 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated and maintained on the RTO for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as 3-hour rolling average. From the date of startup until the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1,400°F.

(b) The Permittee shall determine the 3-hour rolling average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1 as approved by IDEM.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour rolling average temperature as observed during the compliant stack test.

D.1.6 Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1 as approved by IDEM.

(b) The duct pressure or fan amperage shall be observed at least once per day when the RTO is in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

(c) If a condition exists which should result in a response step, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required

by this condition. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, 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.1.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(b), the Permittee shall maintain records at the source of the materials used or processed that contain any VOCs. The records shall be complete and sufficient to establish compliance with the VOC usage or process limit.

(b) To document the compliance status with Condition D.1.5, the Permittee shall maintain the continuous temperature records for the thermal oxidizers and the three (3) hour rolling average temperature used to demonstrate compliance during the most recent compliant stack test.

(c) To document the compliance status with Condition D.1.6, the Permittee shall maintain the daily records of the duct pressure or fan amperage. The Permittee shall include in its daily record when the duct pressure or fan amperage reading is not taken and the reason for the lack of a duct pressure or fan amperage reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.8 Reporting Requirements

(a) A quarterly summary of the information to document the compliance status with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. 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(35).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Natural gas-fired boilers

(l) One (1) natural gas-fired fire tube boiler, identified as BO 1, installed in 1981, exhausted through Stack S 1, heat input capacity: 25.11 million British thermal units per hour.

Under NESHAP 40 CFR 63, Subpart DDDDD, this is an affected facility

Insignificant Activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of the following emission units:

One (1) natural gas-fired fire tube boiler, installed in 1998, exhausting through Stack S-2, heat input capacity: 8.4 million British thermal units per hour. [326 IAC 6-2-4]

Under NESHAP 40 CFR 63, Subpart DDDDD, this is an affected facility

(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 [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(e), particulate emissions from the natural gas-fired fire tube boiler, identified as BO 1, shall not exceed 0.6 lb/mmBtu heat input.

D.2.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the insignificant natural gas-fired fire tube boiler, shall not exceed 0.437 pounds of PM per million British thermal unit.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the Preventive Maintenance Plan required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2]

(d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2].

(e) The following operations with emissions below exemption levels in 326 IAC 2-1.1-3 including the following:

(1) Two (2) parts washers, using a methyl pyrrolidone and dibasic ester blend as solvent [326 IAC 8-3-2]

(2) One (1) storage tank for mineral spirits, identified as TK21, with a storage capacity of 10,000 gallons.

(3) One (1) mixing tank, identified as GM-1, for mixing mineral spirits, gilsonite powder and other compounds, with a maximum capacity of 4400 gallons.

(4) Closed loop heating and cooling systems.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980:

(a) The Permittee of a cold cleaner degreaser shall ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

(2) Equip the degreaser with a device for draining cleaned parts.

(3) Close the degreaser cover whenever parts are not being handled in the degreaser.

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.

(5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).

(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could

allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) The Permittee of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:

(A) must be a solid, fluid stream; and

(B) shall be applied at a pressure that does not cause excessive splashing.

D.3.2 Material requirements for cold cleaner degreasers [326 IAC 8-3-8]

(a) Pursuant to 326 IAC 8-3-8(b)(2), on and after January 1, 2015 the Permittee shall not operate the degreasing operations with a solvent that has a VOC composite partial vapor pressure than exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Pursuant to 326 IAC 8-3-8(c)(2), the Permittee shall maintain the following records for each solvent purchase for the degreasing operations:

(A) The name and address of the solvent supplier.
(B) The date of purchase (or invoice/bill date of contract servicer indicating service date).
(C) The type of solvent purchased.
(D) The total volume of the solvent purchased.
(E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(c) Pursuant to 326 IAC 8-3-8(d), all the records specified in paragraph (b) above shall be retained on-site or accessible electronically from the site for the most recent three (3) year period, and reasonably accessible for an additional two (2) year period.

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D.3.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions from the following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment shall be limited to five hundred fifty-one thousandths (0.551) pound per hour.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(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.4.1 VOC Best Available Control Technology (BACT) Avoidance [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable to the thin film evaporator No.2 (TF 2):

(i) The uncontrolled VOC emission from the new thin film evaporator No. 2 (TF 2) shall not exceed 3.3 pounds per ton of reclaimed solvent.

(ii) The amount of reclaimed solvent produced in the thin film evaporator No. 2 (TF 2) shall not exceed 12,030 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with the above limits shall limit the VOC potential to emit from thin film evaporator No. 2 (TF 2) to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 8-1-6 (New facilities, general reduction requirements) not applicable to thin film evaporator No. 2 (TF 2).

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the Preventive Maintenance Plan required by this condition.

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

D.4.3 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.1, the Permittee shall maintain monthly records of the amount of reclaimed solvent produced using thin film evaporator No. 2 (TF 2).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.4.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. 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(35).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput

capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(h) One (1) mixed solvent (molecular sieve) dryer, identified as MS 1, installed in 1995, capacity: 6,500 gallons per batch, one (1) batch per 13.5 hours, with condenser recovery system for startup, no control, exhausted through Stack MS1.

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under NESHAPs 40 CFR 63, Subparts DD, PP, and H, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is an affected facility.

(m) Product storage tanks:

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an

affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, DD, OO, and H, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

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

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20] [40 CFR 63] [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart H.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.1.2 National Emissions Standards for Organic Hazardous Air Pollutants for Equipment Leaks NESHAP [40 CFR Part 63, Subpart H] [326 IAC 20-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart H (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-1, for the emission units listed above:

(1) 40 CFR 63.160(a)
(2) 40 CFR 63.160(f)
(3) 40 CFR 63.162(e)
(4) 40 CFR 63.162(a),(c)
(5) 40 CFR 63.180(d)
(6) 40 CFR 63.181(a)
(7) 40 CFR 63.181(c),(j)
(8) 40 CFR 63.182(a)

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP 40 CFR 63, Subpart DD

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified

as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(h) One (1) mixed solvent (molecular sieve) dryer, identified as MS 1, installed in 1995, capacity: 6,500 gallons per batch, one (1) batch per 13.5 hours, with condenser recovery system for startup, no control, exhausted through Stack MS1.

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under NESHAPs 40 CFR 63, Subparts DD, PP, and H, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is an affected facility.

(m) Product storage tanks:

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, DD, OO, and H, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an

affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

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

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20][40 CFR 63][326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NESHAP, Subpart DD [40 CFR 63, Subpart A][326 IAC 20-1]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart DD.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.2.2 National Emissions Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations NESHAP [40 CFR Part 63, Subpart DD][326 IAC 20-23]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DD (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 20-23, for the emission units listed above:

(1) 40 CFR 63.680
(2) 40 CFR 63.681
(3) 40 CFR 63.683
(4) 40 CFR 63.685
(5) 40 CFR 63.688
(6) 40 CFR 63.689
(7) 40 CFR 63.690
(8) 40 CFR 63.691
(9) 40 CFR 63.693
(10) 40 CFR 63.694
(11) 40 CFR 63.695

(12) 40 CFR 63.696
(13) 40 CFR 63.697
(14) 40 CFR 63.698
(15) Table 1
(16) Table 2
(17) Table 3

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

E.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

No later than one hundred eighty (180) days after the installation of regenerative thermal oxidizer (RTO), the Permittee shall perform the testing required under 40 CFR 61, Subpart DD utilizing methods as approved by the Commissioner to document compliance with Condition E.2.2. These tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP, Subpart OO

(m) Product storage tanks:

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under NESHAPs 40 CFR 63, DD, OO, and H, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under NESHAPs 40 CFR 63, Subparts DD, OO, and H, this is considered an affected facility.

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

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20][40 CFR Part 63][326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-35, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart OO.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.3.2 National Emission Standards for Tanks - Level 1 NESHAP [40 CFR Part 63, Subpart OO][326 IAC 20-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart OO (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 20-36, for the emission units listed above:

(1) 40 CFR 63.900
(2) 40 CFR 63.901
(3) 40 CFR 63.902
(4) 40 CFR 63.905
(5) 40 CFR 63.906
(6) 40 CFR 63.907
(7) 40 CFR 63.908

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

E.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee shall perform the testing required under 40 CFR 63, Subpart OO utilizing methods as approved by the Commissioner to document compliance with Condition E.3.2. These tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP, Subpart PP

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under NESHAPs 40 CFR 63, Subparts DD, PP, and H, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 20][40 CFR Part 63][326 IAC 2-7-5(1)]

E.4.1 NESHAP, Subpart PP, Requirements [40 CFR 63, Subpart PP][326 IAC 20-36]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart PP.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.4.2 National Emission Standards for Containers NESHAP [40 CFR Part 63, Subpart PP][326 IAC 20-36]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart PP (included as Attachment D to the operating permit), which are incorporated by reference as 326 IAC 20-36, for the emission units listed above:

(1) 40 CFR 63.920
(2) 40 CFR 63.921
(3) 40 CFR 63.924
(4) 40 CFR 63.925
(5) 40 CFR 63.926
(6) 40 CFR 63.929

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

E.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

No later than one hundred eighty (180) days after the installation of regenerative thermal oxidizer (RTO), the Permittee shall perform the testing required under 40 CFR 63, Subpart PP utilizing methods as approved by the Commissioner to document compliance with Condition E.4.2. These

tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION E.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: 40 CFR 264, Subpart AA

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(n) Tanks and Mixers:

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidiz as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under NESHAP 40 CFR 63, Subparts DD and H, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

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

Resources Conversation Recovery Act (RCRA) Requirements

E.5.1 Resources Conservation Recovery Act [40 CFR Part 264, Subpart AA]

Pursuant to 40 CFR Part 264, Subpart AA, the Permittee shall comply with the provisions of 40 CFR Part 264, Subpart AA (included as Attachment E to the operating permit), for the process vents from VD 1/TK 22, Col1/TK 18, Col2/TK 19, VP 1, DP 1/TK 20, TF 1, TF 2, RTO, TK 40, TK 41, TK43, TK-44, and V 61, as specified as follows.

(1) 40 CFR 264.1030

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(2) 40 CFR 264.1031
(3) 40 CFR 264.1032
(4) 40 CFR 264.1033
(5) 40 CFR 264.1034
(6) 40 CFR 264.1035
(7) 40 CFR 264.1036

E.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

No later than one hundred eighty (180) days after the installation of regenerative thermal oxidizer (RTO), the Permittee shall perform the testing required under 40 CFR Part 264, utilizing methods as approved by the Commissioner to document compliance with Condition E.5.2. These tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION E.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(k) One (1) natural gas-fired fire tube boiler, identified as BO 1, installed in 1981, heat input capacity: 25.11 million British thermal units per hour, no control, exhausted through Stack S 1.

Under NESHAP 40 CFR 63, Subpart DDDDD, this is an affected facility

Insignificant Activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of the following emission unit:

One (1) natural gas-fired fire tube boiler, installed in 1998, exhausting through Stack S-2, heat input capacity: 8.4 million British thermal units per hour. [326 IAC 6-2]

Under NESHAP 40 CFR 63, Subpart DDDDD, this is an affected facility

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

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20][40 CFR 63][326 IAC 2-7-5(1)]

E.6.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [40 CFR 63, Subpart A] [326 IAC 20-1]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.6.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD][326 IAC 20-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (included as Attachment Fto the operating permit), which are incorporated by reference as 326 IAC 20-1, for the emission units listed above:

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a), (d)
(4) 40 CFR 63.7495(a), (b), and (d)
(5) 40 CFR 63.7499

(6) 40 CFR 63.7500
(7) 40 CFR 63.7505
(8) 40 CFR 63.7510
(9) 40 CFR 63.7522
(10) 40 CFR 63.7530(d)
(11) 40 CFR 63.7540
(12) 40 CFR 63.7545
(13) 40 CFR 63.7550
(14) 40 CFR 63.7555
(15) 40 CFR 63.7560
(16) 40 CFR 63.7565
(17) 40 CFR 63.7570
(18) 40 CFR 63.7575
(19) Table 1 to 40 CFR 63

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

Source Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Source Address: 1500 Western Avenue, Connersville, Indiana 47331
Part 70 Permit No.: T041-32531-00015

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:

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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: Reclaimed Energy, Division of Superior Oil Company, Inc.
Source Address: 1500 Western Avenue, Connersville, Indiana 47331
Part 70 Permit No.: T041-32531-00015

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**) daytime 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:

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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: _____

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

Part 70 Quarterly Report

Source Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Source Address: 1500 Western Avenue, Connersville, Indiana 47331
Part 70 Permit No.: T041-32531-00015
Facility: All facilities (except TF 2) equipped with the regenerative thermal oxidizer and other recycling/processing operations
Parameter: VOC emissions
Limit: Not exceed 58.9 tons per twelve (12) consecutive month period, with compliance determination at the end of each month.

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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

Part 70 Quarterly Report

Source Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Source Address: 1500 Western Avenue, Connersville, Indiana 47331
Part 70 Permit No.: T041-32531-00015
Facility: Thin film evaporator No. 2 (TF 2)
Parameter: reclaimed solvent production
Limit: 12,030 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

☐ No deviation occurred in this quarter.

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

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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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: Reclaimed Energy, Division of Superior Oil Company, Inc.
Source Address: 1500 Western Avenue, Connersville, Indiana 47331
Part 70 Permit No.: T041-32531-00015

Months: **to** **Year:**

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B -Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. 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".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ 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:	

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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: _____

Attachment A

Part 70 Operating Permit No: 041-32531-00015

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Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart H—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

Source: 59 FR 19568, Apr. 22, 1994, unless otherwise noted.

§63.160 Applicability and designation of source.

(a) The provisions of this subpart apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR part 63 that references this subpart.

(b) After the compliance date for a process unit, equipment to which this subpart applies that are also subject to the provisions of:

(1) 40 CFR part 60 will be required to comply only with the provisions of this subpart.

(2) 40 CFR part 61 will be required to comply only with the provisions of this subpart.

(c) If a process unit subject to the provisions of this subpart has equipment to which this subpart does not apply, but which is subject to a standard identified in paragraph (c)(1), (c)(2), or (c)(3) of this section, the owner or operator may elect to apply this subpart to all such equipment in the process unit. If the owner or operator elects this method of compliance, all VOC in such equipment shall be considered, for purposes of applicability and compliance with this subpart, as if it were organic hazardous air pollutant (HAP). Compliance with the provisions of this subpart, in the manner described in this paragraph, shall be deemed to constitute compliance with the standard identified in paragraph (c)(1), (c)(2), or (c)(3) of this section.

(1) 40 CFR part 60, subpart VV, GGG, or KKK; (2) 40 CFR part 61, subpart F or J; or (3) 40 CFR part 264, subpart BB or 40 CFR part 265, subpart BB.

(2) [Reserved]

(d) The provisions in §63.1(a)(3) of subpart A of this part do not alter the provisions in paragraph (b) of this section.

(e) Except as provided in any subpart that references this subpart, lines and equipment not containing process fluids are not subject to the provisions of this subpart. Utilities, and other non-process lines, such as heating and cooling systems which do not combine their materials with those in the processes they serve, are not considered to be part of a process unit.

(f) The provisions of this subpart do not apply to research and development facilities or to bench-scale batch processes, regardless of whether the facilities or processes are located at the same plant site as a process subject to the provisions of this subpart.

(g) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators of CMPU that are subject to §63.100 may choose to comply with the provisions of 40 CFR part 65 for all Group 1 and Group 2 process vents, Group 1 storage vessels, Group 1 transfer operations, and equipment that are subject to §63.100, that are part of the CMPU. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) For equipment, 40 CFR part 65 satisfies the requirements of §§63.102, 63.103, and 63.162 through 63.182. When choosing to comply with 40 CFR part 65, the requirements of §63.180(d) continue to apply.

(ii) For Group 1 and Group 2 process vents, Group 1 storage vessels, and Group 1 transfer operations, comply with §63.110(i)(1).

(2) *Part 65, subpart C or F.* For owners or operators choosing to comply with 40 CFR part 65, each surge control vessel and bottoms receiver subject to §63.100 that meets the conditions specified in table 2 or table 3 of this subpart shall meet the requirements for storage vessels in 40 CFR part 65, subpart C; all other equipment subject to §63.100 shall meet the requirements in 40 CFR part 65, subpart F.

(3) *Part 63, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C or F, for equipment subject to §63.100 must also comply with the applicable general provisions of this part 63 listed in table 4 of this subpart. All sections and paragraphs of subpart A of this part that are not mentioned in table 4 of this subpart do not apply to owners or operators of equipment subject to §63.100 of subpart F complying with 40 CFR part 65, subpart C or F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C or F, must comply with 40 CFR part 65, subpart A.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 59 FR 53360, Oct. 24, 1994; 60 FR 18029, Apr. 10, 1995; 61 FR 31439, June 20, 1996; 64 FR 20198, Apr. 26, 1999; 65 FR 78285, Dec. 14, 2000]

§63.161 Definitions.

All terms used in this subpart shall have the meaning given them in the Act and in this section as follows, except as provided in any subpart that references this subpart.

Batch process means a process in which the equipment is fed intermittently or discontinuously. Processing then occurs in this equipment after which the equipment is generally emptied. Examples of industries that use batch processes include pharmaceutical production and pesticide production.

Batch product-process equipment train means the collection of equipment (e.g., connectors, reactors, valves, pumps, etc.) configured to produce a specific product or intermediate by a batch process.

Bench-scale batch process means a batch process (other than a research and development facility) that is operated on a small scale, such as one capable of being located on a laboratory bench top. This bench-scale equipment will typically include reagent feed vessels, a small reactor and associated product separator, recovery and holding equipment. These processes are only capable of producing small quantities of product.

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further downstream processing.

Closed-loop system means an enclosed system that returns process fluid to the process and is not vented to the atmosphere except through a closed-vent system.

Closed-purge system means a system or combination of system and portable containers, to capture purged liquids. Containers must be covered or closed when not being filled or emptied.

Closed-vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back into a process.

Combustion device means an individual unit of equipment, such as a flare, incinerator, process heater, or boiler, used for the combustion of organic hazardous air pollutant emissions.

Compliance date means the dates specified in §63.100(k) or §63.100(l)(3) of subpart F of this part for process units subject to subpart F of this part; the dates specified in §63.190(e) of subpart I of this part for process units subject to subpart I of this part. For sources subject to other subparts in 40 CFR part 63 that reference this subpart, compliance date will be defined in those subparts. However, the compliance date for §63.170 shall be no later than 3 years after the effective date of those subparts unless otherwise specified in such other subparts.

Connector means flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this regulation. For the purpose of reporting and recordkeeping, connector means joined fittings that are not inaccessible, glass, or glass-lined as described in §63.174(h) of this subpart.

Control device means any equipment used for recovering, recapturing, or oxidizing organic hazardous air pollutant vapors. Such equipment includes, but is not limited to, absorbers, carbon adsorbers, condensers, flares, boilers, and process heaters.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, and instrumentation system in organic hazardous air pollutant service; and any control devices or systems required by this subpart.

First attempt at repair means to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere, followed by monitoring as specified in §63.180 (b) and (c), as appropriate, to verify whether the leak is repaired, unless the owner or operator determines by other means that the leak is not repaired.

Flow indicator means a device which indicates whether gas flow is, or whether the valve position would allow gas flow to be, present in a line.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in in-process combustion equipment such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards, such as ANSI B31-3.

In food/medical service means that a piece of equipment in organic hazardous air pollutant service contacts a process stream used to manufacture a Food and Drug Administration regulated product where leakage of a barrier fluid into the process stream would cause any of the following:

(1) A dilution of product quality so that the product would not meet written specifications,

(2) An exothermic reaction which is a safety hazard,

(3) The intended reaction to be slowed down or stopped, or

(4) An undesired side reaction to occur.

In gas/vapor service means that a piece of equipment in organic hazardous air pollutant service contains a gas or vapor at operating conditions.

In heavy liquid service means that a piece of equipment in organic hazardous air pollutant service is not in gas/vapor service or in light liquid service.

In light liquid service means that a piece of equipment in organic hazardous air pollutant service contains a liquid that meets the following conditions:

(1) The vapor pressure of one or more of the organic compounds is greater than 0.3 kilopascals at 20 °C,

(2) The total concentration of the pure organic compounds constituents having a vapor pressure greater than 0.3 kilopascals at 20 °C is equal to or greater than 20 percent by weight of the total process stream, and

(3) The fluid is a liquid at operating conditions.

NOTE: Vapor pressures may be determined by the methods described in 40 CFR 60.485(e)(1).

In liquid service means that a piece of equipment in organic hazardous air pollutant service is not in gas/vapor service.

In organic hazardous air pollutant or *in organic HAP service* means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP's as determined according to the provisions of §63.180(d) of this subpart. The provisions of §63.180(d) of this subpart also specify how to determine that a piece of equipment is not in organic HAP service.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals below ambient pressure.

In volatile organic compound or *in VOC service* means, for the purposes of this subpart, that:

(1) The piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight (see 40 CFR 60.2 for the definition of VOC, and 40 CFR 60.485(d) to determine whether a piece of equipment is not in VOC service); and

(2) The piece of equipment is not in heavy liquid service as defined in 40 CFR 60.481.

In-situ sampling systems means nonextractive samplers or in-line samplers.

Initial start-up means the first time a new or reconstructed source begins production. Initial start-up does not include operation solely for testing equipment. Initial start-up does not include subsequent start-ups (as defined in this section) of process units following malfunctions or process unit shutdowns.

Instrumentation system means a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow, etc.). Valves and connectors are the predominant type of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems. Only valves nominally 0.5 inches and smaller, and connectors nominally 0.75 inches and smaller in diameter are considered instrumentation systems for the purposes of this subpart. Valves greater than nominally 0.5 inches and connectors greater than nominally 0.75 inches associated with instrumentation systems are not considered part of instrumentation systems and must be monitored individually.

Liquids dripping means any visible leakage from the seal including dripping, spraying, misting, clouding, and ice formation. Indications of liquid dripping include puddling or new stains that are indicative of an existing evaporated drip.

Nonrepairable means that it is technically infeasible to repair a piece of equipment from which a leak has been detected without a process unit shutdown.

On-site or *On site* means, with respect to records required to be maintained by this subpart, that the records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the chemical manufacturing process unit to which the records pertain, or storage in central files elsewhere at the major source.

Open-ended valve or line means any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Polymerizing monomer means a molecule or compound usually containing carbon and of relatively low molecular weight and simple structure (e.g., hydrogen cyanide, acrylonitrile, styrene), which is capable of conversion to polymers, synthetic resins, or elastomers by combination with itself due to heat generation caused by a pump mechanical seal surface, contamination by a seal fluid (e.g., organic peroxides or chemicals that will form organic peroxides), or a combination of both with the resultant polymer buildup causing rapid mechanical seal failure.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period due to a malfunction in the process.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 psig or by a vacuum are not pressure relief devices.

Process unit means a chemical manufacturing process unit as defined in subpart F of this part, a process subject to the provisions of subpart I of this part, or a process subject to another subpart in 40 CFR part 63 that references this subpart.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit during which it is technically feasible to clear process material from a process unit or part of a process unit consistent with safety constraints and during which repairs can be effected. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. An unscheduled work practice or operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the process unit or part of the process unit of materials and start up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown, is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Recapture device means an individual unit of equipment capable of and used for the purpose of recovering chemicals, but not normally for use, reuse, or sale. Recapture devices include, but are not limited to, absorbers, carbon absorbers, and condensers.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use or reuse. Recovery devices include, but are not limited to, absorbers, carbon absorbers, and condensers. For purposes of the monitoring, recordkeeping, and reporting requirements of this subpart, recapture devices are considered recovery devices.

Repaired means that equipment:

(1) Is adjusted, or otherwise altered, to eliminate a leak as defined in the applicable sections of this subpart, and

(2) Unless otherwise specified in applicable provisions of this subpart, is monitored as specified in §63.180 (b) and (c), as appropriate, to verify that emissions from the equipment are below the applicable leak definition.

Routed to a process or route to a process means the emissions are conveyed by hard-piping or a closed vent system to any enclosed portion of a process unit where the emissions are predominately recycled and/or consumed in the same manner as a material that fulfills the same function in the process; and/or transformed by chemical reaction into materials that are not organic hazardous air pollutants; and/or incorporated into a product; and/or recovered.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take non-routine grab samples is not considered a sampling connection system.

Screwed connector means a threaded pipe fitting where the threads are cut on the pipe wall and the fitting requires only two pieces to make the connection (i.e., the pipe and the fitting).

Sensor means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

Set pressure means the pressure at which a properly operating pressure relief device begins to open to relieve atypical process system operating pressure.

Start-up means the setting in operation of a piece of equipment or a control device that is subject to this subpart.

Surge control vessel means feed drums, recycle drums, and intermediate vessels. Surge control vessels are used within a process unit (as defined in the specific subpart that references this subpart) when in-process storage, mixing, or management of flow rates or volumes is needed to assist in production of a product.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 60 FR 18024, 18029, Apr. 10, 1995; 61 FR 31439, June 20, 1996; 62 FR 2788, Jan. 17, 1997]

§63.162 Standards: General.

(a) Compliance with this subpart will be determined by review of the records required by §63.181 of this subpart and the reports required by §63.182 of this subpart, review of performance test results, and by inspections.

(b)(1) An owner or operator may request a determination of alternative means of emission limitation to the requirements of §§63.163 through 63.170, and §§63.172 through 63.174 of this subpart as provided in §63.177.

(2) If the Administrator makes a determination that a means of emission limitation is a permissible alternative to the requirements of §§63.163 through 63.170, and §§63.172 through 63.174 of this subpart, the owner or operator shall comply with the alternative.

(c) Each piece of equipment in a process unit to which this subpart applies shall be identified such that it can be distinguished readily from equipment that is not subject to this subpart. 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 unit boundaries by some form of weatherproof identification.

(d) Equipment that is in vacuum service is excluded from the requirements of this subpart.

(e) Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of §§63.163 through 63.174 of this subpart and §63.178 of this subpart if it is identified as required in §63.181(j) of this subpart.

(f) When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, the following requirements apply:

(1) Clearly identify the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored as specified in §§63.168(f)(3), and 63.175(e)(7)(i)(D) of this subpart, and no leak has been detected during the follow-up monitoring. If the owner or operator elects to comply using the provisions of §63.174(c)(1)(i) of this subpart, the identification on a connector may be removed after it is monitored as specified in §63.174(c)(1)(i) and no leak is detected during that monitoring.

(3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of §63.174(c)(1)(i), may be removed after it is repaired.

(g) Except as provided in paragraph (g)(1) of this section, all terms in this subpart that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), refer to the standard calendar periods unless specified otherwise in the section or subsection that imposes the requirement.

(1) If the initial compliance date does not coincide with the beginning of the standard calendar period, an owner or operator may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of paragraphs (g)(2) or (g)(3) of this section.

(2) Time periods specified in this subpart for completion of required tasks may be changed by mutual agreement between the owner or operator and the Administrator, as specified in subpart A of this part. For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(3) Except as provided in paragraph (g)(1) or (g)(2) of this section, where the period specified for compliance is a standard calendar period, if the initial compliance date does not coincide with the beginning of the calendar period, compliance shall be required according to the schedule specified in paragraphs (g)(3)(i) or (g)(3)(ii) of this section, as appropriate.

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(4) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during each period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

(h) In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this subpart 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 subpart. However, if the repairs are unsuccessful, a leak is detected and the owner or operator shall take further action as required by applicable provisions of this subpart.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 62 FR 2789, Jan. 17, 1997; 68 FR 37345, June 23, 2003]

§63.163 Standards: Pumps in light liquid service.

(a) The provisions of this section apply to each pump that is in light liquid service.

(1) The provisions are to be implemented on the dates specified in the specific subpart in 40 CFR part 63 that references this subpart in the phases specified below:

(i) For each group of existing process units at existing sources subject to the provisions of subparts F or I of this part, the phases of the standard are:

(A) Phase I, beginning on the compliance date;

(B) Phase II, beginning no later than 1 year after the compliance date; and

(C) Phase III, beginning no later than 2½ years after the compliance date.

(ii) For new sources subject to the provisions of subparts F or I of this part, the applicable phases of the standard are:

(A) After initial start-up, comply with the Phase II requirements; and

(B) Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(2) The owner or operator of a source subject to the provisions of subparts F or I of this part may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(3) Sources subject to other subparts in 40 CFR part 63 that reference this subpart shall comply on the dates specified in the applicable subpart.

(b)(1) The owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in §63.180(b) of this subpart and shall comply with the requirements of paragraphs (a) through (d) of this section, except as provided in §63.162(b) of this subpart and paragraphs (e) through (j) of this section.

(2) The instrument reading, as determined by the method as specified in §63.180(b) of this subpart, that defines a leak in each phase of the standard is:

(i) For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) For Phase II, an instrument reading of 5,000 parts per million or greater.

(iii) For Phase III, an instrument reading of:

(A) 5,000 parts per million or greater for pumps handling polymerizing monomers;

(B) 2,000 parts per million or greater for pumps in food/medical service; and

(C) 1,000 parts per million or greater for all other pumps.

(3) 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.

(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 paragraph (c)(3) of this section or §63.171 of this subpart.

(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) For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.

(d)(1) The owner or operator shall decide no later than the first monitoring period whether to calculate percent leaking pumps on a process unit basis or on a source-wide basis. Once the owner or operator has decided, all subsequent percent calculations shall be made on the same basis.

(2) If, in Phase III, 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 owner or operator shall implement a quality improvement program for pumps that complies with the requirements of §63.176 of this subpart.

(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:

$$\%P_L = ((P_L - P_S)/(P_T - P_S)) \times 100$$

where:

$\%P_L$ = Percent leaking pumps

P_L = Number of pumps found leaking as determined through monthly monitoring as required in paragraphs (b)(1) and (b)(2) of this section.

P_T = Total pumps in organic HAP service, including those meeting the criteria in paragraphs (e) and (f) of this section.

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

(e) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (a) through (d) of this section, 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 §63.172 of this subpart; 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 §63.180(b) of this subpart 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 paragraph (e)(3) of this section 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 paragraph (e)(6)(i) of this section, or if, based on the criteria established in paragraph (e)(6)(i) of this section, 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 §63.171 of this subpart.

(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 paragraphs (a) through (c) of this section.

(g) Any pump equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §63.172 of this subpart is exempt from the requirements of paragraphs (b) through (e) of this section.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(3) and (e)(4) of this section, and the daily requirements of paragraph (e)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

(i) If more than 90 percent of the pumps at a process unit meet the criteria in either paragraph (e) or (f) of this section, the process unit is exempt from the requirements of paragraph (d) of this section.

(j) Any pump that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor pump is exempt from the requirements of paragraphs (b) through (e) of this section if:

(1) The owner or operator of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of this section; and

(2) The owner or operator of the pump 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.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 61 FR 31439, June 20, 1996; 62 FR 2789, Jan. 17, 1997; 64 FR 20198, Apr. 26, 1999]

§63.164 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in §63.162(b) of this subpart and paragraphs (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) of this section 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 §63.172 of this subpart; or

(3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream.

(c) The barrier fluid shall not be in light liquid service.

(d) Each barrier fluid system as described in paragraphs (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.

(e)(1) Each sensor as required in paragraph (d) of this section shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.

(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.

(g)(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 §63.171 of this subpart.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) through (g) of this section if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft seal back to a process or a fuel gas system or to a control device that complies with the requirements of §63.172 of this subpart.

(i) Any compressor that is designated, as described in §63.181(b)(2)(ii) of this subpart, to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:

(1) Is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in §63.180(c) of this subpart; and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 62 FR 2790, Jan. 17, 1997; 64 FR 20198, Apr. 26, 1999]

§63.165 Standards: Pressure relief devices in gas/vapor service.

(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 paragraph (b) of this section, as measured by the method specified in §63.180(c) of this subpart.

(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 §63.171 of this subpart.

(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 §63.180(c) of this subpart.

(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 §63.172 of this subpart is exempt from the requirements of paragraphs (a) and (b) of this section.

(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 paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(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 §63.171 of this subpart.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 62 FR 2790, Jan. 17, 1997]

§63.166 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §63.162(b) of this subpart. 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 as required in paragraph (a) of this section shall:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid to a process; or

(3) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of §63.172 of this subpart; or

(4) Collect, store, and transport the purged process fluid to a system or facility identified in paragraph (b)(4)(i), (ii), or (iii) of this section.

(i) A waste management unit as defined in §63.111 of subpart G of this part, if the waste management unit is subject to, and operated in compliance with the provisions of subpart G of this part applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of subpart G of part 63, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR part 63, subpart G applicable to group 1 wastewater streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility.

(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) 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 the requirements of paragraphs (a) and (b) of this section.

[59 FR 19568, Apr. 22, 1994, as amended at 61 FR 31439, June 20, 1996]

§63.167 Standards: Open-ended valves or lines.

(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 §63.162(b) of this subpart and paragraphs (d) and (e) of this section.

(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, 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.

(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 paragraph (a) of this section 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 paragraphs (a), (b) and (c) of this section.

(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 paragraphs (a) through (c) of this section are exempt from the requirements of paragraph (a) through (c) of this section.

[59 FR 19568, Apr. 22, 1994, as amended at 61 FR 31440, June 20, 1996]

§63.168 Standards: Valves in gas/vapor service and in light liquid service.

(a) The provisions of this section apply to valves that are either in gas service or in light liquid service.

(1) The provisions are to be implemented on the dates set forth in the specific subpart in 40 CFR part 63 that references this subpart as specified in paragraph (a)(1)(i), (a)(1)(ii), or (a)(1)(iii) of this section.

(i) For each group of existing process units at existing sources subject to the provisions of subpart F or I of this part, the phases of the standard are:

(A) Phase I, beginning on the compliance date;

(B) Phase II, beginning no later than 1 year after the compliance date; and

(C) Phase III, beginning no later than $2\frac{1}{2}$ years after the compliance date.

(ii) For new sources subject to the provisions of subpart F or I of this part, the applicable phases of the standard are:

(A) After initial start-up, comply with the Phase II requirements; and

(B) Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(iii) Sources subject to other subparts in 40 CFR part 63 that reference this subpart shall comply on the dates specified in the applicable subpart.

(2) The owner or operator of a source subject to this subpart may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(3) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of §63.180(b)(6) of this subpart.

(b) The owner or operator of a source subject to this subpart shall monitor all valves, except as provided in §63.162(b) of this subpart and paragraphs (h) and (i) of this section, at the intervals specified in paragraphs (c) and (d) of this section and shall comply with all other provisions of this section, except as provided in §63.171, §63.177, §63.178, and §63.179 of this subpart.

(1) The valves shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart.

(2) The instrument reading that defines a leak in each phase of the standard is:

(i) For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) For Phase II, an instrument reading of 500 parts per million or greater.

(iii) For Phase III, an instrument reading of 500 parts per million or greater.

(c) In Phases I and II, each valve shall be monitored quarterly.

(d) In Phase III, the owner or operator shall monitor valves for leaks at the intervals specified below:

(1) At process units with 2 percent or greater leaking valves, calculated according to paragraph (e) of this section, the owner or operator shall either:

(i) Monitor each valve once per month; or

(ii) Within the first year after the onset of Phase III, implement a quality improvement program for valves that complies with the requirements of §63.175 (d) or (e) of this subpart and monitor quarterly.

(2) At process units with less than 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in paragraphs (d)(3) and (d)(4) of this section.

(3) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters.

(4) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.

(e)(1) Percent leaking valves at a process unit shall be determined by the following equation:

$$\%V_L = (V_L/(V_T + V_C)) \times 100$$

where:

$\%V_L$ = Percent leaking valves as determined through periodic monitoring required in paragraphs (b) through (d) of this section.

V_L = Number of valves found leaking excluding nonrepairables as provided in paragraph (e)(3)(i) of this section.

V_T = Total valves monitored, in a monitoring period excluding valves monitored as required by (f)(3) of this section.

V_C = Optional credit for removed valves = 0.67 × net number (i.e., total removed−total added) of valves in organic HAP service removed from process unit after the date set forth in §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 $V_C = 0$.

(2) For use in determining monitoring frequency, as specified in paragraph (d) of this section, 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.

(3)(i) Nonrepairable 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 paragraph (e)(3)(ii) of this section. Otherwise, a number of nonrepairable 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 nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.

(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 §63.171 of this subpart.

(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 §63.180 (b) and (c), as appropriate, to determine whether the valve has resumed leaking.

(ii) Periodic monitoring required by paragraphs (b) through (d) of this section may be used to satisfy the requirements of this paragraph (f)(3), if the timing of the monitoring period coincides with the time specified in this paragraph (f)(3). Alternatively, other monitoring may be performed to satisfy the requirements of this paragraph (f)(3), regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this paragraph (f)(3).

(iii) If a leak is detected by monitoring that is conducted pursuant to paragraph (f)(3) of this section, the owner or operator shall follow the provisions of paragraphs (f)(3)(iii)(A) and (f)(3)(iii)(B) of this section, to determine whether that valve must be counted as a leaking valve for purposes of §63.168(e) of this subpart.

(A) If the owner or operator elected to use periodic monitoring required by paragraphs (b) through (d) of this section to satisfy the requirements of paragraph (f)(3) of this section, then the valve shall be counted as a leaking valve.

(B) If the owner or operator elected to use other monitoring, prior to the periodic monitoring required by paragraphs (b) through (d) of this section, to satisfy the requirements of paragraph (f)(3) of this section, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

(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.

(h) Any valve that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor valve is exempt from the requirements of paragraphs (b) through (f) of this section if:

(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of this section; and

(2) The owner or operator of the valve 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.

(i) Any valve that is designated, as described in §63.181(b)(7)(ii) of this subpart, as a difficult-to-monitor valve is exempt from the requirements of paragraphs (b) through (d) of this section if:

(1) The owner or operator of the valve 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;

(2) The process unit within which the valve is located is an existing source or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(j) Any equipment located at a plant site with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in paragraph (d)(1) of this section. Instead, the owner or operator shall monitor each valve in organic HAP service for leaks once each quarter, or comply with paragraph (d)(3) or (d)(4) of this section except as provided in paragraphs (h) and (i) of this section.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48176, Sept. 20, 1994; 61 FR 31440, June 20, 1996; 62 FR 2790, Jan. 17, 1997]

§63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.

(a) Pumps, valves, connectors, and agitators 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 §63.180(b) of this subpart 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 paragraphs (c) and (d) of this section, it is not necessary to monitor the system for leaks by the method specified in §63.180(b) of this subpart.

(b) If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for all other pumps (including pumps in food/medical service), or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices 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 §63.171 of this subpart.

(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 paragraph (a) of this section that is not monitored by the method specified in §63.180(b), 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) First attempts at repair include, but are not limited to, the practices described under §§63.163(c)(2) and 63.168(g) of this subpart, for pumps and valves, respectively.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48177, Sept. 20, 1994; 60 FR 18029, Apr. 10, 1995; 62 FR 2790, Jan. 17, 1997; 65 FR 78285, Dec. 14, 2000]

§63.170 Standards: Surge control vessels and bottoms receivers.

Each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in table 2 or table 3 of this subpart 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 §63.172 of this subpart, except as provided in §63.162(b) of this subpart, or comply with the requirements of §63.119(b) or (c) of subpart G of this part.

[60 FR 18024, Apr. 10, 1995]

§63.171 Standards: Delay of repair.

(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) 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) Delay of repair for valves, connectors, and agitators is also allowed if:

(1) The owner or operator 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 §63.172 of this subpart.

(d) Delay of repair for pumps is also allowed if:

(1) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of §63.176(d) of this subpart will provide better performance or:

(i) A dual mechanical seal system that meets the requirements of §63.163(e) of this subpart,

(ii) A pump that meets the requirements of §63.163(f) of this subpart, or

(iii) A closed-vent system and control device that meets the requirements of §63.163(g) of this subpart; 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 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.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48177, Sept. 20, 1994; 65 FR 78285, Dec. 14, 2000]

§63.172 Standards: Closed-vent systems and control devices.

(a) Owners or operators of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in §63.162(b) of this subpart.

(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 par million by volume, whichever is less stringent. The 20 parts per million by volume performance standard is not applicable to the provisions of §63.179.

(c) Enclosed combustion devices shall be designed and operated to reduce 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, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C.

(d) Flares used to comply with this subpart shall comply with the requirements of §63.11(b) of subpart A of this part.

(e) Owners or operators of control devices that are used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

NOTE: The intent of this provision is to ensure proper operation and maintenance of the control device.

(f) Except as provided in paragraphs (k) and (l) of this section, each closed-vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.

(1) If the closed-vent system is constructed of hard-piping, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in paragraph (g) of this section, 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 duct work, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in paragraph (g) of this section, and

(ii) Conduct annual inspections according to the procedures in paragraph (g) of this section.

(g) Each closed-vent system shall be inspected according to the procedures in §63.180(b) of this subpart.

(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 paragraph (i) of this section.

(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 paragraph (i) of this section.

(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 owner or operator 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.

(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 owner or operator shall comply with the provisions of either paragraph (j)(1) or (j)(2) of this section, except as provided in paragraph (j)(3) of this section.

(1) Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in §63.118(a)(3) of subpart G of this part. 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 this paragraph.

(k) Any parts of the closed-vent system that are designated, as described in paragraph 63.181(b)(7)(i), as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1) and (f)(2) of this section if:

(1) The owner or operator 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 paragraph (f)(1) or (f)(2) of this section; and

(2) The owner or operator 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.

(l) Any parts of the closed-vent system that are designated, as described in §63.181 (b)(7)(i) of this subpart, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1) and (f)(2) of this section if:

(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.

(m) Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of this subpart, such system or control device shall be operating.

(n) After the compliance dates specified in §63.100 of subpart F of this part, the owner or operator of any control device subject to this subpart that is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart BB, or is subject to monitoring and recordkeeping requirements in 40 CFR part 265, subpart BB, may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart, or with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, as described in this paragraph, which shall constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart. The owner or operator shall identify which option has been chosen, in the next periodic report required by §63.182(d).

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48177, Sept. 20, 1994; 61 FR 31440, June 20, 1996; 62 FR 2790, Jan. 17, 1997]

§63.173 Standards: Agitators in gas/vapor service and in light liquid service.

(a)(1) Each agitator shall be monitored monthly to detect leaks by the methods specified in §63.180(b) of this subpart, except as provided in §63.162(b) of this subpart.

(2) If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.

(b)(1) Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator.

(2) If there are indications of liquids dripping from the agitator, 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 §63.171 of this subpart.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in paragraphs (d)(1) through (d)(6) of this section 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 §63.172 of this subpart; 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 §63.180(b) of this subpart 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 paragraph (d)(3) of this section 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 paragraph (d)(6)(i) of this section, or if, based on the criteria established in paragraph (d)(6)(i) of this section, 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 §63.171 of this subpart.

(iv) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from paragraphs (a) through (c) of this section.

(f) Any agitator 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 or to a control device that complies with the requirements of §63.172 of this subpart is exempt from the requirements of paragraphs (a) through (c) of the section.

(g) Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(1) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each agitator is visually inspected as often as practical and at least monthly.

(h) Any agitator that is difficult-to-monitor is exempt from the requirements of paragraphs (a) through (d) of this section if:

(1) The owner or operator determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner;

(2) The process unit within which the agitator is located is an existing source or the owner or operator designates less than three percent of the total number of agitators in a new source as difficult-to-monitor; and

(3) The owner or operator follows a written plan that requires monitoring of the agitator at least once per calendar year.

(i) Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of paragraphs (a) through (d) of this section.

(j) Any agitator that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor agitator is exempt from the requirements of paragraphs (a) through (d) of this section if:

(1) The owner or operator of the agitator determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) through (d) of this section; and

(2) The owner or operator of the agitator has a written plan that requires monitoring of the agitator as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

[59 FR 19568, Apr. 22, 1994, as amended at 61 FR 31440, June 20, 1996; 62 FR 2791, Jan. 17, 1997; 64 FR 20198, Apr. 26, 1999]

§63.174 Standards: Connectors in gas/vapor service and in light liquid service.

(a) The owner or operator of a process unit subject to this subpart shall monitor all connectors in gas/vapor and light liquid service, except as provided in §63.162(b) of this subpart, and in paragraphs (f) through (h) of this section, at the intervals specified in paragraph (b) of this section.

(1) The connectors shall be monitored to detect leaks by the method specified in §63.180(b) of this subpart.

(2) If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.

(b) The owner or operator shall monitor for leaks at the intervals specified in either paragraph (b)(1) or (b)(2) of this section and in paragraph (b)(3) of this section.

(1) For each group of existing process units within an existing source, by no later than 12 months after the compliance date, the owner or operator shall monitor all connectors, except as provided in paragraphs (f) through (h) of this section.

(2) For new sources, within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific subpart that references this subpart, whichever is later, the owner or operator shall monitor all connectors, except as provided in paragraphs (f) through (h) of this section.

(3) After conducting the initial survey required in paragraph (b)(1) or (b)(2) of this section, the owner or operator shall perform all subsequent monitoring of connectors at the frequencies specified in paragraphs (b)(3)(i) through (b)(3)(v) of this section, except as provided in paragraph (c)(2) of this section:

(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. An owner or operator may comply with this paragraph 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 owner or operator 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 owner or operator may monitor the connectors one

time every 4 years. An owner or operator may comply with the requirements of this paragraph 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 paragraph (b) of this section using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the owner or operator shall increase the monitoring frequency to one time every 2 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii) of this section when the percent leaking connectors decreases to less than 0.5 percent.

(v) If a process unit complying with requirements of paragraph (b)(3)(iii) of this section using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of paragraph (b)(3)(iii) of this section when the percent leaking connectors decreases to less than 0.5 percent.

(4) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of §63.180(b)(6).

(c)(1)(i) Except as provided in paragraph (c)(1)(ii) of this section, 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 paragraph (d) of this section, unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of paragraph (i)(2) of this section.

(ii) As an alternative to the requirements in paragraph (c)(1)(i) of this section, an owner or operator may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the owner or operator may not count nonrepairable connectors for the purposes of paragraph (i)(2) of this section. The owner or operator shall calculate the percent leaking connectors for the monitoring periods described in paragraph (b) of this section, by setting the nonrepairable component, C_{AN}, in the equation in paragraph (i)(2) of this section to zero for all monitoring periods.

(iii) An owner or operator may switch alternatives described in paragraphs (c)(1) (i) and (ii) of this section at the end of the current monitoring period he is in, provided that it is reported as required in §63.182 of this subpart 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 paragraph (b)(3) of this section, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the dates specified in paragraph (c)(2)(iii) or (c)(2)(iv) of this section may:

(i) Comply with the requirements of §63.169 of this subpart, 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 paragraph (d) of this section.

(iii) For sources subject to subparts F and I of this part, the provisions of paragraph (c)(2) of this section apply to screwed connectors installed before December 31, 1992.

(iv) For sources not identified in paragraph (c)(2)(iii) of this section, the provisions of paragraph (c)(2) of this section apply to screwed connectors installed before the date of proposal of the applicable subpart of this part that references this subpart.

(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 paragraph (g) of this section and in §63.171 of this subpart. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(e) [Reserved]

(f) Any connector that is designated, as described in §63.181(b)(7)(i) of this subpart, as an unsafe-to-monitor connector is exempt from the requirements of paragraph (a) of this section if:

(1) The owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraphs (a) through (e) of this section; and

(2) The owner or operator 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.

(g) Any connector that is designated, as described in §63.181(b)(7)(iii) of this subpart, as an unsafe-to-repair connector is exempt from the requirements of paragraphs (a), (d), and (e) of this section if:

(1) The owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (d) of this section; and

(2) The connector will be repaired before the end of the next scheduled process unit shutdown.

(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 paragraphs (a) and (c) of this section and from the recordkeeping and reporting requirements of §63.181 and §63.182 of this subpart. 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 §63.171 of this subpart and paragraph (g) of this section.

(3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(i) For use in determining the monitoring frequency, as specified in paragraph (b) of this section, the percent leaking connectors shall be calculated as specified in paragraphs (i)(1) and (i)(2) of this section.

(1) For the first monitoring period, use the following equation:

$$\% C_L = C_L/(C_t + C_C) \times 100$$

where:

$\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of this section.

C_L = Number of connectors measured at 500 parts per million or greater, by the method specified in §63.180(b) of this subpart.

C_t = Total number of monitored connectors in the process unit.

C_C = Optional credit for removed connectors = 0.67 × net (i.e., total removed—total added) number 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 $C_C = 0$.

(2) For subsequent monitoring periods, use the following equation:

$$\% C_L = [(C_L - C_{AN})/(C_t + C_C)] \times 100$$

where:

$\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of this section.

C_L = Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in §63.180(b) of this subpart.

C_{AN} = Number of allowable nonrepairable connectors, as determined by monitoring required in paragraphs (b)(3) and (c) of this section, not to exceed 2 percent of the total connector population, C_t.

C_t = Total number of monitored connectors, including nonrepairables, in the process unit.

C_C = Optional credit for removed connectors = 0.67 × 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 $C_C = 0$.

(j) Optional credit for removed connectors. If an owner or operator eliminates a connector subject to monitoring under paragraph (b) of this section, the owner or operator may receive credit for elimination of the connector, as described in paragraph (i) of this section, provided the requirements in paragraphs (j)(1) through (j)(4) are met.

(1) The connector was welded after the date of proposal of the specific subpart that references this subpart.

(2) The integrity of the weld is demonstrated by monitoring it according to the procedures in §63.180(b) of this subpart or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.

(3) Welds created after the date of proposal but before the date of promulgation of a specific subpart that references this subpart are monitored or tested by 3 months after the compliance date specified in the applicable subpart.

(4) Welds created after promulgation of the subpart that references this subpart are monitored or tested within 3 months after being welded.

(5) 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 this subpart.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48177, Sept. 20, 1994; 61 FR 31440, June 20, 1996; 62 FR 2791, Jan. 17, 1997]

§63.175 Quality improvement program for valves.

(a) In Phase III, an owner or operator may elect to comply with one of the alternative quality improvement programs specified in paragraphs (d) and (e) of this section. The decision to use one of these alternative provisions to comply with the requirements of §63.168(d)(1)(ii) of this subpart must be made during the first year of Phase III for existing process units and for new process units.

(b) An owner or operator of a process unit subject to the requirements of paragraph (d) or (e) of this section shall comply with those requirements until the process unit has fewer than 2 percent leaking valves, calculated as a rolling average of 2 consecutive quarters, as specified in §63.168(e) of this subpart.

(c) After the process unit has fewer than 2 percent leaking valves, the owner or operator may elect to comply with the requirements in §63.168 of this subpart, to continue to comply with the requirements in paragraph (e) (or (d), if appropriate) of this section, or comply with both the requirements in §63.168 and §63.175.

(1) If the owner or operator elects to continue the quality improvement program, the owner or operator is exempt from the requirements for performance trials as specified in paragraph (e)(6) of this section, or further progress as specified in paragraph (d)(4) of this section, as long as the process unit has fewer than 2 percent leaking valves calculated according to §63.168(e).

(2) If the owner or operator elects to comply with both paragraph (e) of this section and §63.168 of this subpart, he may also take advantage of the lower monitoring frequencies associated with lower leak rates in §63.168 (d)(2), (d)(3), and (d)(4) of this subpart.

(3) If the owner or operator elects not to continue the quality improvement program, the program is no longer an option if the process unit again exceeds 2 percent leaking valves, and in such case, monthly monitoring will be required.

(d) The following requirements shall be met if an owner or operator elects to use a quality improvement program to demonstrate further progress:

(1) The owner or operator shall continue to comply with the requirements in §63.168 of this subpart except each valve shall be monitored quarterly.

(2) The owner or operator shall collect the following data, and maintain records as required in §63.181(h)(1) of this subpart, for each valve in each process unit subject to the quality improvement program:

(i) The maximum instrument reading observed in each monitoring observation before repair, the response factor for the stream if appropriate, the instrument model number, and date of the observation.

(ii) Whether the valve is in gas or light liquid service.

(iii) If a leak is detected, the repair methods used and the instrument readings after repair.

(3) The owner or operator shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(4) The owner or operator must demonstrate progress in reducing the percent leaking valves each quarter the process unit is subject to the requirements of paragraph (d) of this section, except as provided in paragraphs (d)(4)(ii) and (d)(4)(iii) of this section.

(i) Demonstration of progress shall mean that for each quarter there is at least a 10-percent reduction in the percent leaking valves from the percent leaking valves determined for the preceding monitoring period. The percent leaking valves shall be calculated as a rolling average of two consecutive quarters of monitoring data. The percent reduction shall be calculated using the rolling average percent leaking valves, according to the following:

$\%LV_R = (\%LV_{AVG1} - \%LV_{AVG2} / \%LV_{AVG1} \times 100$

where:

$\%LV_R$ = Percent leaking valve reduction.

$\%LV_{AVG1} = (\%V_{Li} + \%V_{Li=1})/2$.

$\%LV_{AVG2} = (\%V_{Li=1} + \%V_{Li=2})/2$.

where:

$\%V_{Li}$, $\%V_{Li=1}$, $\%V_{Li=2}$ are percent leaking valves calculated for subsequent monitoring periods, i, i + 1, i + 2.

(ii) An owner or operator who fails for two consecutive rolling averages to demonstrate at least a 10-percent reduction per quarter in percent leaking valves, and whose overall average percent reduction based on two or more rolling averages is less than 10 percent per quarter, shall either comply with the requirements in §63.168(d)(1)(i) of this subpart using monthly monitoring or shall comply using a quality improvement program for technology review as specified in paragraph (e) of this section. If the owner or operator elects to comply with the requirements of paragraph (e) of this section, the schedule for performance trials and valve replacements remains as specified in paragraph (e) of this section.

(iii) As an alternative to the provisions in paragraph (d)(4)(i), an owner or operator may use the procedure specified in paragraphs (d)(4)(iii)(A) and (d)(4)(iii)(B) of this section to demonstrate progress in reducing the percent leaking valves.

(A) The percent reduction that must be achieved each quarter shall be calculated as follows:

$$\%RR = \frac{\%V_L - 2\%}{0.10}$$

%RR = percent reduction required each quarter, as calculated according to §63.168(e)

$\%V_L$ = percent leaking valves, calculated according to §63.168(e), at the time elected to use provisions of §63.168(d)(1)(ii)

(B) The owner or operator shall achieve less than 2 percent leaking valves no later than 2 years after electing to use the demonstration of progress provisions in §63.175(d) of this subpart.

(e) The following requirements shall be met if an owner or operator elects to use a quality improvement program of technology review and improvement:

(1) The owner or operator shall comply with the requirements in §63.168 of this subpart except the requirement for monthly monitoring in §63.168(d)(1)(i) of this subpart does not apply.

(2) The owner or operator shall collect the data specified below, and maintain records as required in §63.181(h)(2), for each valve in each process unit subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or group of process units basis. The data shall include the following:

(i) Valve type (e.g., ball, gate, check); valve manufacturer; valve design (e.g., external stem or actuating mechanism, flanged body); materials of construction; packing material; and year installed.

(ii) Service characteristics of the stream such as operating pressure, temperature, line diameter, and corrosivity.

(iii) Whether the valve is in gas or light liquid service.

(iv) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if adjusted, instrument model number, and date of the observation.

(v) If a leak is detected, the repair methods used and the instrument readings after repair.

(vi) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The owner or operator shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(4) The owner or operator shall inspect all valves removed from the process unit due to leaks. The inspection shall determine which parts of the valve have failed and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5)(i) The owner or operator shall analyze the data collected to comply with the requirements of paragraph (e)(2) of this section to determine the services, operating or maintenance practices, and valve designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) The analysis shall also be used to identify any superior performing valve technologies that are applicable to the service(s), operating conditions, or valve designs associated with poorer than average emission performance. A superior performing valve technology is one for which a group of such valves has a leak frequency of less than 2 percent for specific applications in such a process unit. A candidate superior performing valve technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 2 percent leaking valves in the process unit.

(iii) The analysis shall include consideration of:

(A) The data obtained from the inspections of valves removed from the process unit due to leaks,

(B) Information from the available literature and from the experience of other plant sites that will identify valve designs or technologies and operating conditions associated with low emission performance for specific services, and

(C) Information on limitations on the service conditions for the valve design and operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a company, or a group of process units.

(v) The first analysis of the data shall be completed no later than 18 months after the start of Phase III. The first analysis shall be performed using a minimum of two quarters of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify superior performing valve designs or technologies that can be applied to the operating conditions and services identified as having poorer than average performance, except as provided in paragraph (e)(6)(v) of this section. The trial program shall be used to evaluate the feasibility of using in the process unit the valve designs or technologies that have been identified by others as having low emission performance.

(i) The trial program shall include on-line trials of valves or operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 2 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in

contact with the process fluid. If any of the candidate superior performing valve technologies is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in §63.181(h)(5)(ii) of this subpart.

(ii) The number of valves in the trial evaluation program shall be the lesser of 1 percent or 20 valves for programs involving single process units and the lesser of 1 percent or 50 valves for programs involving groups of process units.

(iii) The trial evaluation program shall specify and include documentation of:

(A) The candidate superior performing valve designs or technologies to be evaluated, the stages for evaluating the identified candidate valve designs or technologies, including the estimated time period necessary to test the applicability;

(B) The frequency of monitoring or inspection of the equipment;

(C) The range of operating conditions over which the component will be evaluated; and

(D) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial valves.

(iv) The performance trials shall initially be conducted for, at least, a 6-month period beginning not later than 18 months after the start of Phase III. Not later than 24 months after the start of Phase III, the owner or operator shall have identified valve designs or technologies that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The owner or operator shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (e)(6)(vi) of this section. The compilation of candidate and demonstrated superior emission performance valve designs or technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 total employees shall be exempt from trial evaluations of valves. Plant sites exempt from the trial evaluations of valves shall begin the program at the start of the fourth year of Phase III.

(vi) An owner or operator who has conducted performance trials on all candidate superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible candidate superior technologies remaining. The owner or operator shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) Each owner or operator who elects to use a quality improvement program for technology review and improvement shall prepare and implement a valve quality assurance program that details purchasing specifications and maintenance procedures for all valves in the process unit. The quality assurance program may establish any number of categories, or classes, of valves as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (e)(5) of this section, if applicable, the findings of the trial evaluation required in paragraph (e)(6) of this section, and the operating conditions in the process unit. The quality assurance program shall be reviewed and, as appropriate, updated each year as long as the process unit has 2 percent or more leaking valves.

(i) The quality assurance program shall:

(A) Establish minimum design standards for each category of valves. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(B) Require that all equipment orders specify the design standard (or minimum tolerances) for the valve;

(C) Include a written procedure for bench testing of valves that specifies performance criteria for acceptance of valves and specifies criteria for the precision and accuracy of the test apparatus. All valves repaired off-line after preparation of the quality assurance plan shall be bench-tested for leaks. This testing may be conducted by the owner or operator of the process unit, by the vendor, or by a designated representative. The owner or operator shall install only those valves that have been documented through bench-testing to be nonleaking.

(D) Require that all valves repaired on-line be monitored using the method specified in §63.180(b) of this subpart for leaks for 2 successive months, after repair.

(E) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the owner or operator of the process unit or by a designated representative.

(F) Detail off-line valve maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished valves will meet the design specifications for the valve type and will operate such that emissions are minimized.

(ii) The quality assurance program shall be established no later than the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees; and no later than the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees.

(8) Beginning at the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees and at the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees, each valve that is replaced for any reason shall be replaced with a new or modified valve that complies with the quality assurance standards for the valve category and that is identified as superior emission performance technology. Superior emission performance technology means valves or valve technologies identified with emission performance that, combined with appropriate process, operating, and maintenance practices, will result in less than 2 percent leaking valves for specific applications in a large population, except as provided in paragraph (e)(8)(ii) of this section.

(i) The valves shall be maintained as specified in the quality assurance program.

(ii) If a superior emission performance technology cannot be identified, then valve replacement shall be with one of (if several) the lowest emission performance technologies that has been identified for the specific application.

[59 FR 19568, Apr. 22, 1994, as amended at 60 FR 63631, Dec. 12, 1995]

§63.176 Quality improvement program for pumps.

(a) In Phase III, if, on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the owner or operator shall comply with the requirements of this section as specified below:

(1) Pumps that are in food/medical service or in polymerizing monomer service shall comply with all requirements except for those specified in paragraph (d)(8) of this section.

(2) Pumps that are not in food/medical or polymerizing monomer service shall comply with all requirements of this section.

(b) The owner or operator shall comply with the requirements of this section until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit (or plant site). Once the performance level is achieved, the owner or operator shall comply with the requirements in §63.163 of this subpart.

(c) If in a subsequent monitoring period, the process unit (or plant site) has greater than 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the owner or operator shall resume the quality improvement program starting at performance trials.

(d) The quality improvement program shall include the following:

(1) The owner or operator shall comply with the requirements in §63.163 of this subpart.

(2) The owner or operator shall collect the following data, and maintain records as required in §63.181(h)(3), for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis.

(i) Pump type (e.g., piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g., external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material; and year installed.

(ii) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours.

(iii) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation.

(iv) If a leak is detected, the repair methods used and the instrument readings after repair.

(v) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(3) The owner or operator shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program.

(4) The owner or operator shall inspect all pumps or pump seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(5)(i) The owner or operator shall analyze the data collected to comply with the requirements of paragraph (d)(2) of this section to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the service(s), operating conditions, or pump or pump seal designs associated with poorer than average emission performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10 percent for specific applications in the process unit or plant site. A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 10 percent leaking pumps in the process unit (or plant site).

(iii) The analysis shall include consideration of:

(A) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks;

(B) Information from the available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emission performance for specific services; and

(C) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units.

(v) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in paragraph (d)(6)(v) of this section. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.

(i) The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 10 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in §63.181(h)(5)(ii).

(ii) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1 percent or two pumps for programs involving single process units and the lesser of 1 percent or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one.

(iii) The trial evaluation program shall specify and include documentation of:

(A) The candidate superior performing pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability;

(B) The frequency of monitoring or inspection of the equipment;

(C) The range of operating conditions over which the component will be evaluated; and

(D) Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps.

(iv) The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the owner or operator shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The owner or operator shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (d)(6)(vi) of this section. The initial list of superior emission performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program.

(vi) An owner or operator who has conducted performance trials on all alternative superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible

alternative superior technologies remaining. The owner or operator shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(7) Each owner or operator shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (d)(5) of this section, if applicable, the findings of the trial evaluation required in paragraph (d)(6) of this section, and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10 percent or more leaking pumps or has three leaking pumps.

(i) The quality assurance program shall:

(A) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(B) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal;

(C) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the owner or operator of the plant site or process unit or by a designated representative; and

(D) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that emissions are minimized.

(ii) The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees.

(8) Beginning at the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the owner or operator shall replace, as described in paragraphs (d)(8)(i) and (d)(8)(ii) of this section, the pumps or pump seals that are not superior emission performance technology with pumps or pump seals that have been identified as superior emission performance technology and that comply with the quality assurance standards for the pump category. Superior emission performance technology is that category or design of pumps or pump seals with emission performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10 percent leaking pumps for specific applications in the process unit or plant site. Superior emission performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement.

(i) Pumps or pump seals shall be replaced at the rate of 20 percent per year based on the total number of pumps in light liquid service. The calculated value shall be rounded to the nearest nonzero integer value. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of §63.163 of this subpart are pumps determined to be superior performance technology.

(ii) The owner or operator may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pump seals and pumps replaced is equivalent to the 20 percent or greater annual replacement rate.

(iii) The pumps shall be maintained as specified in the quality assurance program.

§63.177 Alternative means of emission limitation: General.

(a) Permission to use an alternative means of emission limitation under section 112(h)(3) of the Act shall be governed by the following procedures in paragraphs (b) through (e) of this section.

(b) Where the standard is an equipment, design, or operational requirement:

(1) Each owner or operator applying for permission to use an alternative means of emission limitation under §63.6(g) of subpart A of this part shall be responsible for collecting and verifying emission performance test data for an alternative means of emission limitation.

(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Where the standard is a work practice:

(1) Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation.

(2) For each kind of equipment for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months.

(3) For each kind of equipment for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.

(4) Each owner or operator applying for permission shall commit, in writing, for each kind of equipment to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.

(5) The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4) of this section.

(6) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same or greater emission reduction as the required work practices of this subpart.

(d) An owner or operator may offer a unique approach to demonstrate the alternative means of emission limitation.

(e)(1) Manufacturers of equipment used to control equipment leaks of an organic HAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the organic HAP achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will grant permission according to the provisions of paragraphs (b), (c), and (d) of this section.

§63.178 Alternative means of emission limitation: Batch processes.

(a) As an alternative to complying with the requirements of §§63.163 through 63.171 and §§63.173 through 63.176, an owner or operator of a batch process that operates in organic HAP service during the calendar year may comply with one of the standards specified in paragraphs (b) and (c) of this section, or the owner or operator may petition for approval of an alternative standard under the provisions of §63.177 of this subpart. The alternative standards of this section provide the options of pressure testing or monitoring the equipment for leaks. The owner or operator may switch among the alternatives provided the change is documented as specified in §63.181.

(b) The following requirements shall be met if an owner or operator elects to use pressure testing of batch product-process equipment to demonstrate compliance with this subpart. An owner or operator who complies with the provisions of this paragraph is exempt from the monitoring provisions of §63.163, §§63.168 and 63.169, and §§63.173 through 63.176 of this subpart.

(1) Each time equipment is reconfigured for production of a different product or intermediate, the batch product-process equipment train shall be pressure-tested for leaks before organic HAP is first fed to the equipment and the equipment is placed in organic HAP service.

(i) When the batch product-process train is reconfigured to produce a different product, pressure testing is required only for the new or disturbed equipment.

(ii) Each batch product process that operates in organic HAP service during a calendar year shall be pressure tested at least once during that calendar year.

(iii) Pressure testing is not required for routine seal breaks, such as changing hoses or filters, which are not part of the reconfiguration to produce a different product or intermediate.

(2) The batch product process equipment shall be tested either using the procedures specified in §63.180(f) of this subpart for pressure or vacuum loss or with a liquid using the procedures specified in §63.180(g) of this subpart.

(3)(i) For pressure or vacuum tests, a leak is detected if the rate of change in pressure is greater than 6.9 kilopascals (1 psig) in 1 hour or if there is visible, audible, or olfactory evidence of fluid loss.

(ii) For pressure tests using a liquid, a leak is detected if there are indications of liquids dripping or if there is other evidence of fluid loss.

(4)(i) If a leak is detected, it shall be repaired and the batch product-process equipment shall be retested before start-up of the process.

(ii) If a batch product-process fails the retest or the second of two consecutive pressure tests, it shall be repaired as soon as practicable, but not later than 30 calendar days after the second pressure test, provided the conditions specified in paragraph (d) of this section are met.

(c) The following requirements shall be met if an owner or operator elects to monitor the equipment to detect leaks by the method specified in §63.180(b) of this subpart to demonstrate compliance with this subpart.

(1) The owner or operator shall comply with the requirements of §§63.163 through 63.170, and §§63.172 through 63.176 of this subpart.

(2) The equipment shall be monitored for leaks by the method specified in §63.180(b) of this subpart when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(3) The equipment shall be monitored for leaks as specified below:

(i) Each time the equipment is reconfigured for the production of a new product, the reconfigured equipment shall be monitored for leaks within 30 days of start-up of the process. This initial monitoring of reconfigured equipment shall not be included in determining percent leaking equipment in the process unit.

(ii) Connectors shall be monitored in accordance with the requirements in §63.174 of this subpart.

(iii) Equipment other than connectors shall be monitored at the frequencies specified in table 1 of this subpart. The operating time shall be determined as the proportion of the year the batch product-process that is subject to the provisions of this subpart is operating.

(iv) The monitoring frequencies specified in table 1 of this subpart are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. An owner or operator may monitor anytime during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. For example, if the equipment is not operating during the scheduled monitoring period, the monitoring can be done during the next period when the process is operating.

(4) If 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 paragraph (d) of this section.

(d) Delay of repair of equipment for which leaks have been detected is allowed if the replacement equipment is not available providing the following conditions are met:

(1) Equipment supplies have been depleted and supplies had been sufficiently stocked before the supplies were depleted.

(2) The repair is made no later than 10 calendar days after delivery of the replacement equipment.

§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 §63.172 of this subpart are exempt from the requirements of §63.163, through 63.171, and §§63.173 and 63.174 of this subpart. 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 a control device.

§63.180 Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) Monitoring, as required under this subpart, shall comply with the following requirements:

(1) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A.

(2)(i) Except as provided for in paragraph (b)(2)(ii) of this section, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP's or VOC's, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.

(ii) If no instrument is available at the plant site that will meet the performance criteria specified in paragraph (b)(2)(i) of this section, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph (b)(2)(i) of this section.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(4) Calibration gases shall be:

(i) Zero air (less than 10 parts per million of hydrocarbon in air); and

(ii) Mixtures of methane in air at the concentrations specified in paragraphs (b)(4)(ii)(A) through (b)(4)(ii)(C) of this section. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (b)(2)(i) of this section. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(A) For Phase I, a mixture of methane or other compounds, as applicable, in air at a concentration of approximately, but less than, 10,000 parts per million.

(B) For Phase II, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million for agitators, 5,000 parts per million for pumps, and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of this section.

(C) For Phase III, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators; 2,000 parts per million for pumps in food/medical service; 5,000 parts per million for pumps in polymerizing monomer service; 1,000 parts per million for all other pumps; and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of this section.

(iii) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.

(5) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(6) Monitoring data that do not meet the criteria specified in paragraphs (b)(1) through (b)(5) of this section may be used to qualify for less frequent monitoring under the provisions in §63.168(d)(2) and (d)(3) or §63.174(b)(3)(ii) or (b)(3)(iii) of this subpart provided the data meet the conditions specified in paragraphs (b)(6)(i) and (b)(6)(ii) of this section.

(i) The data were obtained before April 22, 1994.

(ii) The departures from the criteria specified in paragraphs (b)(1) through (b)(5) of this section or from the specified monitoring frequency of §63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of paragraph (b)(2) of this section, or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

(c) When equipment is monitored for compliance as required in §§63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by this subpart, the owner or operator may elect to adjust or not to adjust the instrument readings for background. If an owner or operator elects to not adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (b)(1) through (b)(4) of this section. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in paragraphs (c)(1) through (c)(4) of this section.

(1) The requirements of paragraphs (b) (1) through (4) of this section shall apply.

(2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.

(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 an owner or operator 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.

(2)(i) An owner or operator may use good engineering judgment rather than the procedures in paragraph (d)(1) of this section to determine that the percent organic HAP content does not exceed 5 percent by weight. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (d)(1) of this section shall be used to resolve the disagreement.

(ii) Conversely, the owner or operator 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.

(3) If an owner or operator determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in paragraph (d)(1) of this section, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

(e) When a flare is used to comply with §63.172(d), the owner or operator shall comply with paragraphs (e)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in §63.11(b)(4).

(2) Determine the net heating value of the gas being combusted using the techniques specified in §63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either §63.11(b)(7)(i) (and §63.11(b)(7)(iii), where applicable) or §63.11(b)(8), as appropriate.

(f) The following procedures shall be used to pressure test batch product-process equipment for pressure or vacuum loss to demonstrate compliance with the requirements of §63.178(b)(3)(i) of this subpart.

(1) The batch product-process equipment train shall be pressurized with a gas to a pressure less than the set pressure of any safety relief devices or valves or to a pressure slightly above the operating pressure of the equipment, or alternatively, the equipment shall be placed under a vacuum.

(2) Once the test pressure is obtained, the gas source or vacuum source shall be shut off.

(3) The test shall continue for not less than 15 minutes unless it can be determined in a shorter period of time that the allowable rate of pressure drop or of pressure rise was exceeded. The pressure in the batch product-process equipment shall be measured after the gas or vacuum source is shut off and at the end of the test period. The rate of change in pressure in the batch product-process equipment shall be calculated using the following equation:

$$\Delta\frac{P}{t} = \frac{\left(\left|P_f - P_i\right|\right)}{\left(t_f - t_i\right)}$$

where:

Δ P/t = Change in pressure, psig/hr.

P_f = Final pressure, psig.

P_i = Initial pressure, psig.

$t_f - t_i$ = Elapsed time, hours.

(4) The pressure shall be measured using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of ±2.5 millimeter mercury in the range of test pressure and is capable of measuring pressures up to the relief set pressure of the pressure relief device. If such a pressure measurement device is not reasonably available, the owner or operator shall use a pressure measurement device with a precision of at least + 10 percent of the test pressure of the equipment and shall extend the duration of the test for the time necessary to detect a pressure loss or rise that equals a rate of one psig per hour.

(5) An alternative procedure may be used for leak testing the equipment if the owner or operator demonstrates the alternative procedure is capable of detecting a pressure loss or rise.

(g) The following procedures shall be used to pressure-test batch product-process equipment using a liquid to demonstrate compliance with the requirements of §63.178(b)(3)(ii) of this subpart.

(1) The batch product-process equipment train, or section of the train, shall be filled with the test liquid (e.g., water, alcohol) until normal operating pressure is obtained. Once the equipment is filled, the liquid source shall be shut off.

(2) The test shall be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that the test is a failure.

(3) Each seal in the equipment being tested shall be inspected for indications of liquid dripping or other indications of fluid loss. If there are any indications of liquids dripping or of fluid loss, a leak is detected.

(4) An alternative procedure may be used for leak testing the equipment, if the owner or operator demonstrates the alternative procedure is capable of detecting losses of fluid.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48177, Sept. 20, 1994; 61 FR 31440, June 20, 1996; 62 FR 2792, Jan. 17, 1997; 66 FR 6936, Jan. 22, 2001]

§63.181 Recordkeeping requirements.

(a) An owner or operator of more than one process unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.

(b) Except as provided in paragraph (e) of this section, the following information pertaining to all equipment in each process unit subject to the requirements in §§63.162 through 63.174 of this subpart shall be recorded:

(1)(i) A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in §63.174 of this subpart and instrumentation systems) subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by §63.174 (b)(1) or (b)(2) of this subpart.

(ii) A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) of this subpart and valves subject to the provisions of §63.168(d) of this subpart.

(iii) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.

(2)(i) A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) of this subpart.

(ii) A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of §63.164(i) of this subpart.

(iii) Identification of surge control vessels or bottoms receivers subject to the provisions of this subpart that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.170 of this subpart.

(3)(i) A list of identification numbers for pressure relief devices subject to the provisions in §63.165(a) of this subpart.

(ii) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of §63.165(d) of this subpart.

(4) Identification of instrumentation systems subject to the provisions of this subpart. Individual components in an instrumentation system need not be identified.

(5) Identification of screwed connectors subject to the requirements of §63.174(c)(2) of this subpart. Identification can be by area or grouping as long as the total number within each group or area is recorded.

(6) The following information shall be recorded for each dual mechanical seal system:

(i) Design criteria required in §§63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) of this subpart and an explanation of the design criteria; and

(ii) Any changes to these criteria and the reasons for the changes.

(7) The following information pertaining to all pumps subject to the provisions of §63.163(j), valves subject to the provisions of §63.168(h) and (i) of this subpart, agitators subject to the provisions of §63.173(h) through (j), and connectors subject to the provisions of §63.174(f) and (g) of this subpart shall be recorded:

(i) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.

(ii) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.

(iii) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(8)(i) A list of valves removed from and added to the process unit, as described in §63.168(e)(1) of this subpart, if the net credits for removed valves is expected to be used.

(ii) A list of connectors removed from and added to the process unit, as described in §63.174(i)(1) of this subpart, and documentation of the integrity of the weld for any removed connectors, as required in §63.174(j) of this subpart. This is not required unless the net credits for removed connectors is expected to be used.

(9)(i) For batch process units that the owner or operator elects to monitor as provided under §63.178(c) of this subpart, a list of equipment added to batch product process units since the last monitoring period required in §63.178(c)(3)(ii) and (3)(iii) of this subpart.

(ii) Records demonstrating the proportion of the time during the calendar year the equipment is in use in a batch process that is subject to the provisions of this subpart. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the owner or operator does not adjust monitoring frequency by the time in use, as provided in §63.178(c)(3)(iii) of this subpart.

(10) For any leaks detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(c) For visual inspections of equipment subject to the provisions of this subpart (e.g., §63.163(b)(3), §63.163(e)(4)(i)), the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in paragraph (d) of this section for leaking equipment identified in this inspection, except as provided in paragraph (e) of this section. These records shall be retained for 2 years.

(d) When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of this subpart, the following information shall be recorded and kept for 2 years:

(1) The instrument and the equipment identification number and the operator name, initials, or identification number.

(2) The date the leak was detected and the date of first attempt to repair the leak.

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

(4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(6) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(7)(i) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in §63.174(b) of this subpart, as described in §63.174(c)(1) of this subpart, unless the owner or operator elects to comply with the provisions of §63.174(c)(1)(ii) of this subpart.

(ii) The date and results of monitoring as required in §63.174(c) of this subpart. If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of this section, then all connectors within the designated location shall be monitored.

(8) The date and results of the monitoring required in §63.178(c)(3)(i) of this subpart for equipment added to a batch process unit since the last monitoring period required in §63.178 (c)(3)(ii) and (c)(3)(iii) of this subpart. If no leaking equipment is found in this monitoring, the owner or operator shall record that the inspection was performed. Records of the actual monitoring results are not required.

(9) Copies of the periodic reports as specified in §63.182(d) of this subpart, if records are not maintained on a computerized database capable of generating summary reports from the records.

(e) The owner or operator of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance with this subpart is exempt from the requirements of paragraphs (b), (c), (d), and (f) of this section. Instead, the owner or operator shall maintain records of the following information:

(1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train.

(2) [Reserved]

(3) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of this subpart is not required. Equipment in a batch product process subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.

(4) The dates of each pressure test required in §63.178(b) of this subpart, the test pressure, and the pressure drop observed during the test.

(5) Records of any visible, audible, or olfactory evidence of fluid loss.

(6) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

(i) The date of each pressure test and the date of each leak repair attempt.

(ii) Repair methods applied in each attempt to repair the leak.

(iii) The reason for the delay of repair.

(iv) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(v) The date of successful repair.

(f) The dates and results of each compliance test required for compressors subject to the provisions in §63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in §§63.165 (a) and (b) of this subpart. 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.

(g) The owner or operator shall maintain records of the information specified in paragraphs (g)(1) through (g)(3) of this section for closed-vent systems and control devices subject to the provisions of §63.172 of this subpart. The records specified in paragraph (g)(1) of this section shall be retained for the life of the equipment. The records specified in paragraphs (g)(2) and (g)(3) of this section shall be retained for 2 years.

(1) The design specifications and performance demonstrations specified in paragraphs (g)(1)(i) through (g)(1)(iv) of this section.

(i) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.

(ii) The dates and descriptions of any changes in the design specifications.

(iii) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by §63.11(b) of subpart A of this part.

(iv) A description of the parameter or parameters monitored, as required in §63.172(e) of this subpart, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(2) Records of operation of closed-vent systems and control devices, as specified in paragraphs (g)(2)(i) through (g)(2)(iii) of this section.

(i) Dates and durations when the closed-vent systems and control devices required in §§63.163 through 63.166, and §63.170 of this subpart are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

(ii) Dates and durations during which the monitoring system or monitoring device is inoperative.

(iii) Dates and durations of start-ups and shutdowns of control devices required in §§63.163 through 63.166, and §63.170 of this subpart.

(3) Records of inspections of closed-vent systems subject to the provisions of §63.172 of this subpart, as specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

(i) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) of this subpart during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(ii) For each inspection conducted in accordance with the provisions of §63.172(f)(1) or (f)(2) of this subpart during which leaks were detected, the information specified in paragraph (d) of this section shall be recorded.

(h) Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of this subpart shall maintain the records specified in paragraphs (h)(1) through (h)(9) of this section for the period of the quality improvement program for the process unit.

(1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of this subpart:

(i) All data required in §63.175(d)(2) of this subpart.

(ii) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.

(iii) The beginning and ending dates while meeting the requirements of §63.175(d) of this subpart.

(2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e) of this subpart:

(i) All data required in §63.175(e)(2) of this subpart.

(ii) The percent leaking valves observed each quarter.

(iii) Documentation of all inspections conducted under the requirements of §63.175(e)(4) of this subpart, and any recommendations for design or specification changes to reduce leak frequency.

(iv) The beginning and ending dates while meeting the requirements of §63.175(e) of this subpart.

(3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176 of this subpart:

(i) All data required in §63.176(d)(2) of this subpart.

(ii) The rolling average percent leaking pumps.

(iii) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of this subpart, and any recommendations for design or specification changes to reduce leak frequency.

(iv) The beginning and ending dates while meeting the requirements of §63.176(d) of this subpart.

(4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(5) Records of all analyses required in §§63.175(e) and 63.176(d) of this subpart. The records will include the following:

(i) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.

(ii) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

(iii) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under §§63.175(e)(6)(iii) and 63.176(d)(6)(iii) of this subpart.

(iv) The beginning date and duration of performance trials of each candidate superior emission performing technology.

(6) All records documenting the quality assurance program for valves or pumps as specified in §§63.175(e)(7) and 63.176(d)(7) of this subpart.

(7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of this subpart.

(8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of this subpart.

(9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.

(i) The owner or operator of equipment in heavy liquid service shall comply with the requirements of either paragraph (i)(1) or (i)(2) of this section, as provided in paragraph (i)(3) of this section.

(1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.

(2) When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.

(3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of “in light liquid service.” Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

(j) Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of this subpart under §63.160 of this subpart.

(k) Owners and operators choosing to comply with the requirements of §63.179 of this subpart shall maintain the following records:

(1) Identification of the process unit(s) and the organic HAP's they handle.

(2) A schematic of the process unit, enclosure, and closed-vent system.

(3) A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48177, Sept. 20, 1994; 60 FR 18030, Apr. 10, 1995; 61 FR 31441, June 20, 1996; 62 FR 2792, Jan. 17, 1997; 64 FR 20198, Apr. 26, 1999; 68 FR 37344, June 23, 2003]

§63.182 Reporting requirements.

(a) Each owner or operator of a source subject to this subpart shall submit the reports listed in paragraphs (a)(1) through (a)(5) of this section. Owners or operators requesting an extension of compliance shall also submit the report listed in paragraph (a)(6) of this section.

(1) An Initial Notification described in paragraph (b) of this section, and

(2) A Notification of Compliance Status described in paragraph (c) of this section,

(3) Periodic Reports described in paragraph (d) of this section, and

(4)-(5) [Reserved]

(6) Pursuant to section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing an existing source up to 1 additional year beyond the compliance date specified in the subpart that references this subpart.

(i) For purposes of this subpart, a request for an extension shall be submitted to the operating permit authority as part of the operating permit application. If the State in which the source is located does not have an approved operating permit program, a request for an extension shall be submitted to the Administrator as a separate submittal. The dates specified in §63.6(i) of subpart A of this part for submittal of requests for extensions shall not apply to sources subject to this subpart.

(ii) A request for an extension of compliance must include the data described in §63.6(i)(6)(i) (A), (B), and (D) of subpart A of this part.

(iii) The requirements in §63.6(i)(8) through (i)(14) of subpart A of this part will govern the review and approval of requests for extensions of compliance with this subpart.

(b) Each owner or operator of an existing or new source subject to the provisions of this subpart shall submit a written Initial Notification to the Administrator, containing the information described in paragraph (b)(1), according to the schedule in paragraph (b)(2) of this section. The Initial Notification provisions in §63.9(b)(1) through (b)(3) of subpart A of this part shall not apply to owners or operators of sources subject to this subpart.

(1) The Initial Notification shall include the following information:

(i) The name and address of the owner or operator;

(ii) The address (physical location) of the affected source;

(iii) An identification of the chemical manufacturing processes subject to this subpart; and

(iv) A statement of whether the source can achieve compliance by the applicable compliance date specified in the subpart in 40 CFR part 63 that references this subpart.

(2) The Initial Notification shall be submitted according to the schedule in paragraph (b)(2)(i), (b)(2)(ii), or (b)(2)(iii) of this section, as applicable.

(i) For an existing source, the Initial Notification shall be submitted within 120 days after the date of promulgation of the subpart that references this subpart.

(ii) For a new source that has an initial start-up 90 days after the date of promulgation of this subpart or later, the application for approval of construction or reconstruction required by §63.5(d) of subpart A of this part shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references this subpart).

(iii) For a new source that has an initial start-up prior to 90 days after the date of promulgation of the applicable subpart, the Initial Notification shall be submitted within 90 days after the date of promulgation of the subpart that references this subpart.

(c) Each owner or operator of a source subject to this subpart shall submit a Notification of Compliance Status within 90 days after the compliance dates specified in the subpart in 40 CFR part 63 that references this subpart, except as provided in paragraph (c)(4) of this section.

(1) The notification shall provide the information listed in paragraphs (c)(1)(i) through (c)(1)(iv) of this section for each process unit subject to the requirements of §63.163 through §63.174 of this subpart.

(i) Process unit identification.

(ii) Number of each equipment type (e.g., valves, pumps) excluding equipment in vacuum service.

(iii) Method of compliance with the standard (for example, “monthly leak detection and repair” or “equipped with dual mechanical seals”).

(iv) Planned schedule for each phase of the requirements in §63.163 and §63.168 of this subpart.

(2) The notification shall provide the information listed in paragraphs (c)(2)(i) and (c)(2)(ii) of this section for each process unit subject to the requirements of §63.178(b) of this subpart.

(i) Batch products or product codes subject to the provisions of this subpart, and

(ii) Planned schedule for pressure testing when equipment is configured for production of products subject to the provisions of this subpart.

(3) The notification shall provide the information listed in paragraphs (c)(3)(i) and (c)(3)(ii) of this section for each process unit subject to the requirements in §63.179 of this subpart.

(i) Process unit identification.

(ii) A description of the system used to create a negative pressure in the enclosure and the control device used to comply with the requirements of §63.172 of this subpart.

(4) For existing sources subject to subpart F of this part, the Notification of Compliance Status shall be submitted for the group of process units with the earliest compliance date specified in §63.100(k) of subpart F of this part, by no later than 90 days after the compliance date for that group. The Notification of Compliance Status for each subsequent group shall be submitted as part of the first periodic report that is due not less than 90 days after the compliance date for that group.

(d) The owner or operator of a source subject to this subpart shall submit Periodic Reports.

(1) A report containing the information in paragraphs (d)(2), (d)(3), and (d)(4) of this section shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in paragraph (c) of this section. The first periodic report shall cover the first 6 months after the compliance date specified in §63.100(k)(3) of subpart F. Each subsequent periodic report shall cover the 6 month period following the preceding period.

(2) For each process unit complying with the provisions of §63.163 through §63.174 of this subpart, the summary information listed in paragraphs (i) through (xvi) of this paragraph for each monitoring period during the 6-month period.

(i) The number of valves for which leaks were detected as described in §63.168(b) of this subpart, the percent leakers, and the total number of valves monitored;

(ii) The number of valves for which leaks were not repaired as required in §63.168(f) of this subpart, identifying the number of those that are determined nonrepairable;

(iii) The number of pumps for which leaks were detected as described in §63.163(b) of this subpart, the percent leakers, and the total number of pumps monitored;

(iv) The number of pumps for which leaks were not repaired as required in §63.163(c) of this subpart;

(v) The number of compressors for which leaks were detected as described in §63.164(f) of this subpart;

(vi) The number of compressors for which leaks were not repaired as required in §63.164(g) of this subpart;

(vii) The number of agitators for which leaks were detected as described in §63.173(a) and (b) of this subpart;

(viii) The number of agitators for which leaks were not repaired as required in §63.173(c) of this subpart;

(ix) The number of connectors for which leaks were detected as described in §63.174(a) of this subpart, the percent of connectors leaking, and the total number of connectors monitored;

(x) [Reserved]

(xi) The number of connectors for which leaks were not repaired as required in §63.174(d) of this subpart, identifying the number of those that are determined nonrepairable;

(xii) [Reserved]

(xiii) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

(xiv) The results of all monitoring to show compliance with §§63.164(i), 63.165(a), and 63.172(f) of this subpart conducted within the semiannual reporting period.

(xv) If applicable, the initiation of a monthly monitoring program under §63.168(d)(1)(i) of this subpart, or a quality improvement program under either §§63.175 or 63.176 of this subpart.

(xvi) If applicable, notification of a change in connector monitoring alternatives as described in §63.174(c)(1) of this subpart.

(xvii) If applicable, the compliance option that has been selected under §63.172(n).

(3) For owners or operators electing to meet the requirements of §63.178(b) of this subpart, the report shall include the information listed in paragraphs (i) through (v) of this paragraph for each process unit.

(i) Batch product process equipment train identification;

(ii) The number of pressure tests conducted;

(iii) The number of pressure tests where the equipment train failed the pressure test;

(iv) The facts that explain any delay of repairs; and

(v) The results of all monitoring to determine compliance with §63.172(f) of this subpart.

(4) The information listed in paragraph (c) of this section for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

[59 FR 19568, Apr. 22, 1994, as amended at 59 FR 48178, Sept. 20, 1994; 60 FR 18030, Apr. 10, 1995; 60 FR 63631, Dec. 12, 1995; 62 FR 2792, Jan. 17, 1997]

§63.183 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.160, 63.162 through 63.176, 63.178 through 63.179. Follow the applicable procedures of §63.177 to request an alternative means of emission limitation for batch processes and enclosed-vented process units. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart. Where these standards reference another subpart and modify the requirements, the requirements shall be modified as described in this subpart. Delegation of the modified requirements will also occur according to the delegation provisions of the referenced subpart.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37345, June 23, 2003]

Table 1 to Subpart H of Part 63—Batch Processes

Monitoring Frequency for Equipment Other than Connectors

	Equivalent continuous process monitoring frequency time in use		
Operating time (% of year)	**Monthly**	**Quarterly**	**Semiannually**
0 to <25	Quarterly	Annually	Annually.
25 to <50	Quarterly	Semiannually	Annually.
50 to <75	Bimonthly	Three times	Semiannually.
75 to 100	Monthly	Quarterly	Semiannually.

Table 2 to Subpart H of Part 63—Surge Control Vessels and Bottoms Receivers at Existing Sources

Vessel capacity (cubic meters)	**Vapor pressure[1] (kilopascals)**
75 ≤capacity <151	≥13.1
151 ≤capacity	≥5.2[a]

[1]Maximum true vapor pressure of total organic HAP at operating temperature as defined in subpart G of this part.

[60 FR 18025, Apr. 10, 1995]

Table 3 to Subpart H of Part 63—Surge Control Vessels and Bottoms Receivers at New Sources

Vessel capacity (cubic meters)	**Vapor pressure[1] (kilopascals)**
38 ≤capacity <151	≥13.1
151 ≤capacity	≥0.7

[1]Maximum true vapor pressure of total organic HAP at operating temperature as defined in subpart G of this part.

[60 FR 18025, Apr. 10, 1995]

Table 4 to Subpart H of Part 63—Applicable 40 CFR Part 63 General Provisions

40 CFR part 63, subpart A, provisions applicable to subpart H
§63.1(a)(1), (a)(2), (a)(3), (a)(13), (a)(14), (b)(2) and (c)(4)
§63.2
§63.5(a)(1), (a)(2), (b), (d)(1)(ii), (d)(4), (e), (f)(1) and (f)(2)
§63.6(a), (b)(3), (c)(5), (i)(1), (i)(2), (i)(4)(i)(A), (i)(5) through (i)(14), (i)(16) and (j)
§63.9(a)(2), (b)(4)(i)[a], (b)(4)(ii), (b)(4)(iii), (b)(5)a, (c) and (d)
§63.10(d)(4)
§63.11 (c), (d), and (e)
§63.12(b)

[a]The notifications specified in §63.9(b)(4)(i) and (b)(5) shall be submitted at the times specified in 40 CFR part 65.

[65 FR 78285, Dec. 14, 2000, as amended at 73 FR 78213, Dec. 22, 2008]

Attachment B

Part 70 Operating Permit No: 041-32531-00015

[Downloaded from the eCFR on March 26, 2015]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart DD—National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations

Source: 61 FR 34158, July 1, 1996, unless otherwise noted.

§ 63.680 Applicability and designation of affected sources.

(a) The provisions of this subpart apply to the owner and operator of a plant site for which both of the conditions specified in paragraphs (a)(1) and (a)(2) of this section are applicable. If either one of these conditions does not apply to the plant site, then the owner and operator of the plant site are not subject to the provisions of this subpart.

(1) The plant site is a major source of hazardous air pollutant (HAP) emissions as defined in 40 CFR 63.2.

(2) At the plant site is located one or more of operations that receives off-site materials as specified in paragraph (b) of this section and the operations is one of the following waste management operations or recovery operations as specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section.

(i) A waste management operation that receives off-site material and the operation is regulated as a hazardous waste treatment, storage, and disposal facility (TSDF) under either 40 CFR part 264 or part 265.

(ii) A waste management operation that treats wastewater which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, storage, and disposal facility under 40 CFR 264.1(g)(6) or 40 CFR 265.1(c)(10).

(iii) A waste management operation that treats wastewater which is an off-site material and the operation meets both of the following conditions:

(A) The operation is subject to regulation under either section 402 or 307(b) of the Clean Water Act but is not owned by a “state” or “municipality” as defined by section 502(3) and 502(4), respectively, of the Clean Water Act; and

(B) The treatment of wastewater received from off-site is the predominant activity performed at the plant site.

(iv) A recovery operation that recycles or reprocesses hazardous waste which is an off-site material and the operation is exempted from regulation as a hazardous waste treatment, disposal, and storage facility under 40 CFR 264.1(g)(2) or 40 CFR 265.1(c)(6).

(v) A recovery operation that recycles or reprocesses used solvent which is an off-site material and the operation is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR part 63 or 40 CFR part 61.

(vi) A recovery operation that re-refines or reprocesses used oil which is an off-site material and the operation is regulated under 40 CFR 279 subpart F—Standards for Used Oil Processors and Refiners.

(b) For the purpose of implementing this subpart, an off-site material is a material that meets all of the criteria specified in paragraph (b)(1) of this section but is not one of the materials specified in paragraph (b)(2) of this section.

(1) An off-site material is a material that meets all of the criteria specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section. If any one of these criteria do not apply to the material, then the material is not an off-site material subject to this subpart.

(i) The material is a waste, used oil, or used solvent as defined in §63.681 of this subpart;

(ii) The waste, used oil, or used solvent is not produced or generated within the plant site, but the material is delivered, transferred, or otherwise moved to the plant site from a location outside the boundaries of the plant site; and

(iii) The waste, used oil, or used solvent contains one or more of the hazardous air pollutants (HAP) listed in Table 1 of this subpart based on the composition of the material at the point-of-delivery, as defined in §63.681 of this subpart.

(2) For the purpose of implementing this subpart, the following materials are not off-site materials:

(i) Household waste as defined in 40 CFR 258.2.

(ii) Radioactive mixed waste managed in accordance with all applicable regulations under Atomic Energy Act and Nuclear Waste Policy Act authorities.

(iii) Waste that is generated as a result of implementing remedial activities required under the Resource Conservation and Recovery Act (RCRA) corrective action authorities (RCRA sections 3004(u), 3004(v), or 3008(h)), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorities, or similar Federal or State authorities.

(iv) Waste containing HAP that is generated by residential households (e.g., old paint, home garden pesticides) and subsequently is collected as a community service by government agencies, businesses, or other organizations for the purpose of promoting the proper disposal of this waste.

(v) Waste that is transferred from a chemical manufacturing plant or other facility for which the owner or operator of the facility from which the waste is transferred has complied with the provisions of the air emission control standards for process wastewater specified by another subpart of this part. This exemption does not apply to a source which complies with another subpart of this part by transferring its wastewater off-site for control.

(vi) Waste that is transferred from a chemical manufacturing plant, petroleum refinery, or coke by-product recovery plant which is subject to 40 CFR part 61, subpart FF—National Emission Standards for Benzene Waste Operations, and for which both of the following conditions apply to the waste:

(A) The waste is generated at a facility that is not exempted under the provisions of 40 CFR 61.342(a) from meeting the air emission control standards of 40 CFR part 61, subpart FF; and

(B) The owner or operator of the facility from which the waste is transferred has complied with the provisions of 40 CFR 61.342(f)(2).

(vii) Ship ballast water pumped from a ship to an onshore wastewater treatment facility.

(viii) Hazardous waste that is stored for 10 days or less at a transfer facility in compliance with the provisions of 40 CFR 263.12.

(c) *Affected sources*—(1) *Off-site material management units.* For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of off-site material management units associated with the operation. An off-site material management unit is a tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to manage off-site material. For the purpose of implementing the standards under this subpart, a unit that meets the definition of a tank

or container but also is equipped with a vent that serves as a process vent for any of the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section is not an off-site material management unit but instead is a process vent and is to be included in the appropriate affected source group under paragraph (c)(2) of this section. Examples of such a unit may include, but are not limited to, a distillate receiver vessel, a primary condenser, a bottoms receiver vessel, a surge control tank, a separator tank, and a hot well.

(2) *Process vents.* For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of process equipment associated with the process vents for the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section.

(i) Distillation process used for the treatment, recycling, or recovery of off-site material. Distillation means a process, either batch or continuous, separating one or more off-site material feed streams into two or more exit streams having different component concentrations from those in the feed stream or streams. The separation is achieved by the redistribution of the components between the liquid and vapor phases as they approach equilibrium within the distillation unit.

(ii) Fractionation process used for the treatment, recycling, or recovery of off-site material. Fractionation means a liquid mixture separation process or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(iii) Thin-film evaporation process used for the treatment, recycling, or recovery of off-site material. Thin-film evaporation means a liquid mixture separation process or method that uses a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(iv) Solvent extraction process used for the treatment, recycling, or recovery of off-site material. Solvent extraction means a separation process or method in which a solid or a solution is contacted with a liquid solvent (the material and the solvent being relatively insoluble in each other) to preferentially dissolve and transfer one or more components into the solvent.

(v) Steam stripping process used for the treatment, recycling, or recovery of off-site material. Steam stripping means a liquid mixture separation process or method in which vaporization of the volatile components of a liquid mixture occurs by the introduction of steam directly into the process.

(vi) Gas stripping process used for the treatment, recycling, or recovery of off-site material. Gas stripping means a desorption process or method used to transfer one or more volatile components from a liquid mixture into a gas stream either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are examples of the process configurations used for contacting the gas and a liquid.

(3) *Equipment leaks.* For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of equipment components for which each component meets all of the conditions specified in paragraphs (c)(3)(i) through (c)(3)(iii) of this section. If any one of these conditions do not apply to an equipment component, then that component is not part of the affected source for equipment leaks.

(i) The equipment component is a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system;

(ii) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight; and

(iii) The equipment component is intended to operate for 300 hours or more during a calendar year in off-site material service, as defined in §63.681 of this subpart.

(d) *Facility-wide exemption.* The owner or operator of affected sources subject to this subpart is exempted from the requirements of §§63.682 through 63.699 of this subpart in situations when the total annual quantity of the HAP that is contained in the off-site material received at the plant site is less than 1 megagram per year. For a plant site to be

exempted under the provisions of this paragraph (d), the owner or operator must meet the requirements in paragraphs (d)(1) through (d)(3) of this section.

(1) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material received at the plant site. This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point-of-delivery for each off-site material stream.

(2) The owner or operator must prepare a new determination whenever the extent of changes to the quantity or composition of the off-site material received at the plant site could cause the total annual HAP quantity in the off-site material received at the plant site to exceed the limit of 1 megagram per year.

(3) The owner or operator must maintain documentation to support the owner's or operator's determination of the total annual HAP quantity in the off-site material received at the plant site. This documentation must include the basis and data used for determining the HAP content of the off-site material.

(e) *Compliance dates*—(1) *Existing sources.* The owner or operator of an affected source that commenced construction or reconstruction before October 13, 1994, must achieve compliance with the provisions of this subpart on or before the date specified in paragraphs (e)(1)(i), (ii), or (iii) of this section as applicable to the affected source.

(i) For an affected source that commenced construction or reconstruction before October 13, 1994 and receives off-site material for the first time before February 1, 2000, the owner or operator of this affected source must achieve compliance with the provisions of the subpart (except §§63.685(b)(1)(ii), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) on or before February 1, 2000 unless an extension has been granted by the Administrator as provided in §63.6(i). These existing affected sources shall be in compliance with the tank requirements of §63.685(b)(1)(ii) 2 years after the publication date of the final amendments on March 18, 2015, the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendments on March 18, 2015, and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii) 3 years after the publication date of the final amendments on March 18, 2015.

(ii) For an affected source that commenced construction or reconstruction before October 13, 1994, but receives off-site material for the first time on or after February 1, 2000, but before March 18, 2015, the owner or operator of the affected source must achieve compliance with the provisions of this subpart (except §§63.685(b)(1)(ii), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) upon the first date that the affected source begins to manage off-site material. These existing affected sources shall be in compliance with the tank requirements of §63.685(b)(1)(ii) 2 years after the publication date of the final amendments on March 18, 2015, the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendments on March 18, 2015, and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii) 3 years after the publication date of the final amendments on March 18, 2015.

(iii) For an affected source that commenced construction or reconstruction before October 13, 1994, but receives off-site material for the first time on or after March 18, 2015, the owner or operator of the affected source must achieve compliance with the provisions of this subpart (except §§63.685 (b)(1)(ii), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) upon the first date that the affected source begins to manage off-site material. These existing affected sources shall be in compliance with the tank requirements of §63.685(b)(1)(ii) 2 years after the publication date of the final amendments on March 18, 2015, the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendments on March 18, 2015, and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii) 3 years after the publication date of the final amendments on March 18, 2015.

(2) *New sources.* The owner or operator of an affected source for which construction or reconstruction commences on or after October 13, 1994, must achieve compliance with the provisions of this subpart (except §§63.685(b)(2), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) on or before July 1, 1996, or upon initial startup of operations, whichever date is later as provided in 40 CFR 63.6(b). New affected sources that commenced construction or reconstruction after October 13, 1994, but on or before July 2, 2014, shall be in compliance with the tank requirements of §63.685(b)(2) 2 years after the publication date of the final amendments, the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendments, and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii) 3 years after the effective date of the final amendments. New affected sources that commence construction or reconstruction after July 2, 2014, shall be in compliance with the tank requirements of §63.685(b)(2), the equipment leak requirements of §63.691(b)(2), and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii) upon initial startup or by the effective date of the final amendments, whichever is later.

(f) The provisions of 40 CFR part 63, subpart A—General Provisions that apply and those that do not apply to this subpart are specified in Table 2 of this subpart.

(g) *Applicability of this subpart.* (1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies.

(2) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with this subpart during times when emissions are being routed to such items of equipment, if the shutdown would contravene requirements of this subpart applicable to such items of equipment.

[61 FR 34158, July 1, 1996, as amended at 65 FR 38963, July 20, 1999; 80 FR 14271, Mar. 18, 2015]

§63.681 Definitions.

All terms used in this subpart shall have the meaning given to them in this section, 40 CFR 63.2 of this part, and the Act.

Boiler means an enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator or a process heater.

Bypass means diverting a process vent or closed vent system stream to the atmosphere such that it does not first pass through an emission control device.

Closed-vent system means a system that is not open to the atmosphere and is composed of hard-piping, ductwork, connections, and, if necessary, fans, blowers, or other flow-inducing devices that conveys gas or vapor from an emission point to a control device.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that prevents or reduces air pollutant emissions to the atmosphere by blocking an opening in a cover when the device is secured in the closed position. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

Container means a portable unit used to hold material. Examples of containers include but are not limited to drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as “portable tanks” or “totes”, cargo tank trucks, and tank rail cars.

Continuous record means documentation of data values measured at least once every 15 minutes and recorded at the frequency specified in this subpart.

Continuous recorder means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 15-minutes or more frequent block averages.

Continuous seal means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

Control device means equipment used for recovering, removing, oxidizing, or destroying organic vapors. Examples of such equipment include but are not limited to carbon adsorbers, condensers, vapor incinerators, flares, boilers, and process heaters.

Cover means a device or system that provides a continuous barrier over the material managed in an off-site material management unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings needed for operation, inspection, sampling, maintenance, and repair of the unit provided that each opening is closed when not in use (e.g., access hatches, sampling ports). A cover may be a separate piece of equipment which can be detached and removed from the unit or a *cover* may be formed by structural features permanently integrated into the design of the unit.

Emission point means an individual tank, surface impoundment, container, oil-water or organic-water separator, transfer system, process vent, or enclosure.

Enclosure means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapor through a closed vent system to a control device.

External floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a tank with no fixed roof.

Fixed roof means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the liquid managed in the unit.

Flame zone means the portion of the combustion chamber in a boiler or process heater occupied by the flame envelope.

Floating roof means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the liquid being contained, and is equipped with a continuous seal.

Flow indicator means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow in a bypass line.

Hard-piping means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

Hazardous air pollutants or *HAP* means the specific organic chemical compounds, isomers, and mixtures listed in Table 1 of this subpart.

Hazardous waste means a waste that is determined to be hazardous under the Resource Conservation and Recovery Act (PL 94-580) (RCRA), as implemented by 40 CFR parts 260 and 261.

In gas/vapor service means that a piece of equipment in off-site material service contains or contacts a gas or vapor at operating conditions.

In heavy liquid service means that a piece of equipment in off-site material service is not in gas/vapor service or in light liquid service.

In light liquid service means that a piece of equipment in off-site material service contains or contacts a liquid that meets the following conditions:

(1) The vapor pressure of one or more of the organic compounds is greater than 0.3 kilopascals at 20 °C;

(2) The total concentration of the pure organic compounds constituents having a vapor pressure greater than 0.3 kilopascals at 20 °C is equal to or greater than 20 percent by weight of the total process stream; and

(3) The fluid is a liquid at operating conditions. Note to *In light liquid service:* Vapor pressures may be determined by the methods described in 40 CFR 60.485(e)(1).

In liquid service means that a piece of equipment in off-site material service is not in gas/vapor service.

Individual drain system means a stationary system used to convey wastewater streams or residuals to a waste management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations) conveying wastewater streams or residuals. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., stormwater sewer system) and is segregated from all other individual drain systems.

Internal floating roof means a cover that rests or floats on the liquid surface (but not necessarily in complete contact with it inside a tank that has a fixed roof).

Light-material service means the container is used to manage an off-site material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the off-site material is greater than 0.3 kilopascals (kPa) at 20 °C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight.

Liquid-mounted seal means a foam- or liquid-filled continuous seal mounted in contact with the liquid in a unit.

Maximum HAP vapor pressure means the sum of the individual HAP equilibrium partial pressure exerted by an off-site material at the temperature equal to either: the local maximum monthly average temperature as reported by the National Weather Service when the off-site material is stored or treated at ambient temperature; or the highest calendar-month average temperature of the off-site material when the off-site material is stored at temperatures above the ambient temperature or when the off-site material is stored or treated at temperatures below the ambient temperature. For the purpose of this subpart, maximum HAP vapor pressure is determined using the procedures specified in §63.694(j) of this subpart.

Metallic shoe seal means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

No detectable organic emissions means no escape of organics to the atmosphere as determined using the procedure specified in §63.694(k) of this subpart.

Off-site material means a material that meets all of the criteria specified in paragraph §63.680(b)(1) of this subpart but is not one of the materials specified in §63.680(b)(2) of this subpart.

Off-site material management unit means a tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to manage off-site material.

Off-site material service means any time when a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system contains or contacts off-site material.

Off-site material stream means an off-site material produced or generated by a particular process or source such that the composition and form of the material comprising the stream remain consistent. An off-site material stream may be delivered, transferred, or otherwise moved to the plant site in a continuous flow of material (e.g., wastewater flowing through a pipeline) or in a series of discrete batches of material (e.g., a truckload of drums all containing the same off-site material or multiple bulk truck loads of an off-site material produced by the same process).

Oil-water separator means a separator as defined for this subpart that is used to separate oil from water.

Operating parameter value means a minimum or maximum value established for a control device or treatment process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limitation or standard.

Organic-water separator means a separator as defined for this subpart that is used to separate organics from water.

Plant site means all contiguous or adjoining property that is under common control including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof. A unit or group of units within a contiguous property that are not under common control (e.g., a wastewater treatment unit or solvent recovery unit located at the site but is sold to a different company) is a different plant site.

Point-of-delivery means the point at the boundary or within the plant site where the owner or operator first accepts custody, takes possession, or assumes responsibility for the management of an off-site material stream managed in a

waste management operation or recovery operation specified in §63.680 (a)(2)(i) through (a)(2)(vi) of this subpart. The characteristics of an off-site material stream are determined prior to combining the off-site material stream with other off-site material streams or with any other materials.

Point-of-treatment means a point after the treated material exits the treatment process but before the first point downstream of the treatment process exit where the organic constituents in the treated material have the potential to volatilize and be released to the atmosphere. For the purpose of applying this definition to this subpart, the first point downstream of the treatment process exit is not a fugitive emission point due to an equipment leak from any of the following equipment components: Pumps, compressors, valves, connectors, instrumentation systems, or pressure relief devices.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

Process heater means an enclosed combustion device that transfers heat released by burning fuel directly to process streams or to heat transfer liquids other than water.

Process vent means an open-ended pipe, stack, or duct through which a gas stream containing HAP is continuously or intermittently discharged to the atmosphere from any of the processes listed in §63.680(c)(2)(i) through (vi). For the purpose of this subpart, a process vent is none of the following: a pressure relief device; an open-ended line or other vent that is subject to the equipment leak control requirements under §63.691; or a stack or other vent that is used to exhaust combustion products from a boiler, furnace, process heater, incinerator, or other combustion device.

Recovery operation means the collection of off-site material management units, process vents, and equipment components used at a plant site to manage an off-site material stream from the point-of-delivery through the point where the material has been recycled, reprocessed, or re-refined to obtain the intended product or to remove the physical and chemical impurities of concern.

Separator means a waste management unit, generally a tank, used to separate oil or organics from water. A separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to any additional treatment units such as an air flotation unit clarifier or biological treatment unit. Examples of a separator include, but are not limited to, an API separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

Single-seal system means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

Surface impoundment means a unit that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquids. Examples of surface impoundments include holding, storage, settling, and aeration pits, ponds, and lagoons.

Tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support and is designed to hold an accumulation of liquids or other materials.

Transfer system means a stationary system for which the predominant function is to convey liquids or solid materials from one point to another point within a waste management operation or recovery operation. For the purpose of this subpart, the conveyance of material using a container (as defined for this subpart) or a self-propelled vehicle (e.g., a front-end loader) is not a transfer system. Examples of a transfer system include but are not limited to a pipeline, an individual drain system, a gravity-operated conveyor (such as a chute), and a mechanically-powered conveyor (such as a belt or screw conveyor).

Temperature monitoring device means a piece of equipment used to monitor temperature and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius (°C) or ±1.2 degrees °C, whichever value is greater.

Treatment process means a process in which an off-site material stream is physically, chemically, thermally, or biologically treated to destroy, degrade, or remove hazardous air pollutants contained in the off-site material. A treatment process can be composed of a single unit (e.g., a steam stripper) or a series of units (e.g., a wastewater treatment system). A treatment process can be used to treat one or more off-site material streams at the same time.

Used oil means any oil refined from crude oil or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. This definition is the same definition of "used oil" in 40 CFR 279.1.

Used solvent means a mixture of aliphatic hydrocarbons or a mixture of one and two ring aromatic hydrocarbons that has been used as a solvent and as a result of such use is contaminated by physical or chemical impurities.

Vapor-mounted seal means a continuous seal that is mounted such that there is a vapor space between the liquid in the unit and the bottom of the seal.

Volatile organic hazardous air pollutant concentration or *VOHAP concentration* means the fraction by weight of those compounds listed in Table 1 of this subpart that are in an off-site material as measured using Method 305 in appendix A of this part and expressed in terms of parts per million (ppm). As an alternative to using Method 305, an owner or operator may determine the HAP concentration of an off-site material using any one of the other test methods specified in §63.694(b)(2)(ii) of this subpart. When a test method specified in §63.694(b)(2)(ii) of this subpart other than Method 305 is used to determine the speciated HAP concentration of an off-site material, the individual compound concentration may be adjusted by the corresponding f_{m305} value listed in Table 1 of this subpart to determine a VOHAP concentration.

Waste means a material generated from industrial, commercial, mining, or agricultural operations or from community activities that is discarded, discharged, or is being accumulated, stored, or physically, chemically, thermally, or biologically treated prior to being discarded or discharged.

Waste management operation means the collection of off-site material management units, process vents, and equipment components used at a plant site to manage an off-site material stream from the point-of-delivery to the point where the waste exits or is discharged from the plant site or the waste is placed for on-site disposal in a unit not subject to this subpart (e.g., a waste incinerator, a land disposal unit).

Waste stabilization process means any physical or chemical process used to either reduce the mobility of hazardous constituents in a waste or eliminate free liquids as determined by Test Method 9095—Paint Filter Liquids Test 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 9095 approved by the EPA.) A waste stabilization process includes mixing the waste with binders or other materials and curing the resulting waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification." A waste stabilization process does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38964, July 20, 1999; 80 FR 14272, Mar. 18, 2015]

§63.682 [Reserved]

§63.683 Standards: General.

(a) The general standards under this section apply to owners and operators of affected sources as designated in §63.680(c) of this subpart.

(b) *Off-site material management units.* (1) For each off-site material management unit that is part of an affected source, the owner or operator must meet the requirements in either paragraph (b)(1)(i), (b)(1)(ii), or (b)(1)(iii) of this section except for those off-site material management units exempted under paragraph (b)(2) of this section.

(i) The owner or operator controls air emissions from the off-site material management unit in accordance with the applicable standards specified in §§63.685 through 63.689 of this subpart.

(ii) The owner or operator removes or destroys HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in §63.684 of this subpart.

(iii) The owner or operator determines before placing off-site material in the off-site material management unit that the average VOHAP concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in §63.694(b) of this subpart. This initial determination must be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(2) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section when the owner or operator meets one of the exemptions provided in paragraphs (b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit.

(i) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR part 63 or 40 CFR part 61, and the owner or operator is controlling the HAP listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under part 61 or part 63.

(ii) At the discretion of the owner or operator, one or a combination of off-site material management units may be exempted from the requirements in paragraph (b)(1) of this section when these units meet the condition that the total annual quantity of HAP contained in the off-site material placed in the units exempted under this paragraph (b)(2)(ii) is less than 1 megagram per year. For the off-site material management units selected by the owner or operator to be exempted from the requirements in paragraph (b)(1) of this section, the owner or operator must meet the requirements in paragraphs (b)(2)(ii)(A) and (b)(2)(ii)(B) of this section. An owner or operator may change the off-site material management units selected to be exempted under this paragraph (b)(2)(ii) by preparing a new designation for the exempt-units as required by paragraph (b)(2)(ii)(A) of this section and performing a new determination as required by paragraph (b)(2)(ii)(B) of this section.

(A) The owner or operator must designate each of the off-site material management units selected by the owner or operator to be exempt under paragraph (b)(2)(ii) of this section by either submitting to the Administrator a written notification identifying the exempt-units or permanently marking the exempt-units at the plant site. If an owner or operator chooses to prepare and submit a written notification, this notification must include a site plan, process diagram, or other appropriate documentation identifying each of the exempt-units. If an owner or operator chooses to permanently mark the exempt-units, each exempt-unit must be marked in such a manner that it can be readily identified as an exempt-unit from the other off-site material management units located at the plant site.

(B) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material placed in the units exempted under this paragraph (b)(2)(ii). This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point where the off-site material is placed in each exempted unit. The owner or operator must perform a new determination whenever the extent of changes to the quantity or composition of the off-site material placed in the exempted units could cause the total annual HAP content in the off-site material to exceed 1 megagram per year. The owner or operator must maintain documentation to support the most recent determination of the total annual HAP quantity. This documentation must include the basis and data used for determining the HAP content of the off-site material.

(iii) A tank or surface impoundment is exempted from the requirements in paragraph (b)(1) of this section if the unit is used for a biological treatment process that meets the requirements in either paragraph (b)(2)(iii)(A) or (b)(2)(iii)(B) of this section and the owner or operator complies with the monitoring requirements in §63.684(e)(4) of this subpart.

(A) The HAP biodegradation efficiency (R_{bio}) for the biological treatment process is equal to or greater than 95 percent. The HAP biodegradation efficiency (R_{bio}) shall be determined in accordance with the requirements of §63.694(h) of this subpart.

(B) The total actual HAP mass removal rate (MR_{bio}) for the off-site material treated by the biological treatment process is equal to or greater than the required HAP mass removal rate (RMR) for the off-site material. The total actual HAP mass removal rate (MR_{bio}) must be determined in accordance with the requirements of §63.694(i) of this subpart. The required HAP mass removal rate (RMR) must be determined in accordance with the requirements of §63.694(e) of this subpart.

(iv) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material placed in the unit is a hazardous waste that meets the conditions specified in either paragraph (b)(2)(iv)(A) or (b)(2)(iv)(B) of this section.

(A) The hazardous waste meets the numerical organic concentration limits, applicable to the hazardous waste, as specified in 40 CFR part 268—Land Disposal Restrictions, listed in the table, “Treatment Standards for Hazardous Waste” in 40 CFR 268.40.

(B) The organic hazardous constituents in the hazardous waste have been treated by the treatment technology established by the EPA for the hazardous waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by the EPA under 40 CFR 268.42(b).

(v) A tank used for bulk feed of off-site material to a waste incinerator is exempted from the requirements specified in paragraph (b)(1) of this section if the tank meets all of the conditions specified in paragraphs (b)(2)(v)(A) through (b)(2)(v)(C) of this section.

(A) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under 40 CFR part 61, subpart FF—National Emission Standards for Benzene Waste Operations for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams per year;

(B) The enclosure and control device serving the tank were installed and began operation prior to July 1, 1996; and

(C) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator must annually perform the verification procedure for the enclosure as specified in Section 5.0 to “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure.”

(c) *Process vents.* (1) For each process vent that is part of an affected source, the owner or operator must meet the requirements in either paragraph (c)(1)(i) or (c)(1)(ii) of this section except for those process vents exempted under paragraph (c)(2) of this section.

(i) The owner or operator controls air emissions from the process vent in accordance with the standards specified in §63.690 of this subpart.

(ii) The owner or operator determines before placing off-site material in the process equipment associated with the process vent that the average VOHAP concentration of the off-site material is less than 500 ppmw at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in §63.694(b) of this subpart before any portion of the off-site material stream is placed in the unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(2) A process vent is exempted from the requirements of paragraph (c)(1) of this section when the owner or operator meets one of the exemptions provided in paragraphs (c)(2)(i) through (c)(2)(iii) of this section.

(i) A process vent is exempted from the requirements in paragraph (c)(1) of this section if the process vent is also subject to another subpart under part 63 or 40 CFR part 61, and the owner or operator is controlling the HAP listed in Table 1 of this subpart that are emitted from the process vent in compliance with the provisions specified in the other applicable subpart under part 61 or part 63.

(ii) A process vent is exempted from the requirements specified in paragraph (c)(1) of this section if the owner or operator determines that the process vent stream flow rate is less than 0.005 cubic meters per minute (m^3/min) at standard conditions (as defined in 40 CFR 63.2). The process vent stream flow rate shall be determined in accordance with the procedures specified in §63.694(m) of this subpart. Documentation must be prepared by the owner or operator and maintained at the plant site to support the determination of the process vent stream flow rate. This documentation must include identification of each process vent exempted under this paragraph and the test results used to determine the process vent stream flow rate.

(iii) A process vent is exempted from the requirements specified in paragraph (c)(1) of this section if the owner or operator determines that the process vent stream flow rate is less than 6.0 m^3/min at standard conditions (as defined in 40 CFR 63.2) and the total HAP concentration is less than 20 ppmv. The process vent stream flow rate and total HAP concentration shall be determined in accordance with the procedures specified in §63.694(m) of this subpart. Documentation must be prepared by the owner or operator and maintained at the plant site to support the determination of the process vent stream flow rate and total HAP concentration. This documentation must include identification of each process vent exempted under this paragraph (c)(2)(iii) and the test results used to determine the process vent stream flow rate and total HAP concentration. The owner or operator must perform a new determination of the process vent stream flow rate and total HAP concentration when the extent of changes to operation of the unit on which the process vent is used could cause either the process vent stream flow rate to exceed the limit of 6.0 m^3/min or the total HAP concentration to exceed the limit of 20 ppmv.

(d) *Equipment leaks.* The owner or operator must control equipment leaks from each equipment component that is part of the affected source specified in §63.680(c)(3) of this subpart by implementing leak detection and control measures in accordance with the standards specified in §63.691 of this subpart.

(e) *General duty.* At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(f) In addition to the cases listed in §63.695(e)(4), deviation means any of the cases listed in paragraphs (f)(1) through (6) of this section.

(1) Any instance in which an affected source subject to this subpart, or an owner or operator of such a source, fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit or work practice standard.

(2) When a performance test indicates that emissions of a pollutant in Table 1 to this subpart are exceeding the emission standard for the pollutant specified in Table 1 to this subpart.

(3) When the average value of a monitored operating parameter, based on the data averaging period for compliance specified in §63.695, does not meet the operating limit specified in §63.693.

(4) When an affected source discharges directly into the atmosphere from any of the sources specified in paragraphs (f)(4)(i) and (ii) of this section.

(i) A pressure relief device, as defined in §63.681.

(ii) A bypass, as defined in §63.681.

(5) Any instance in which the affected source subject to this subpart, or an owner or operator of such a source, fails to meet any term or condition specified in paragraph (f)(5)(i) or (ii) of this section.

(i) Any term or condition that is adopted to implement an applicable requirement in this subpart.

(ii) Any term or condition relating to compliance with this subpart that is included in the operating permit for an affected source to obtain such a permit.

(6) Any failure to collect required data, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

[64 FR 38965, July 20, 1999, as amended at 80 FR 14272, Mar. 18, 2015]

§63.684 Standards: Off-site material treatment.

(a) The provisions of this section apply to the treatment of off-site material to remove or destroy HAP for which §63.683(b)(1)(ii) of this subpart references the requirements of this section for such treatment.

(b) The owner or operator shall remove or destroy the HAP contained in off-site material streams to be managed in the off-site material management unit in accordance with §63.683(b)(1)(ii) of this subpart using a treatment process that continuously achieves, under normal operations, one or more of the performance levels specified in paragraphs (b)(1) through (b)(5) of this section (as applicable to the type of treatment process) for the range of off-site material stream compositions and quantities expected to be treated.

(1) *VOHAP concentration.* The treatment process shall reduce the VOHAP concentration of the off-site material using a means, other than by dilution, to achieve one of the following performance levels, as applicable:

(i) In the case when every off-site material stream entering the treatment process has an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery, then the VOHAP concentration of the off-site material shall be reduced to a level that is less than 500 ppmw at the point-of-treatment.

(ii) In the case when off-site material streams entering the treatment process are a mixture of off-site material streams having an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery with off-site material streams having average VOHAP concentrations less than 500 ppmw at the point-of-delivery, then the VOHAP concentration of the off-site material must be reduced to a level at the point-of-treatment that meets the performance level specified in either paragraph (b)(1)(ii)(A) or (B) of this section.

(A) Less than the VOHAP concentration limit (C_R) established for the treatment process using the procedure specified in §63.694(d); or

(B) Less than the lowest VOHAP concentration determined for each of the off-site material streams entering the treatment process as determined by the VOHAP concentration of the off-site material at the point-of-delivery.

(2) *HAP mass removal.* The treatment process shall achieve a performance level such that the total quantity of HAP actually removed from the off-site material stream (MR) is equal to or greater than the required mass removal (RMR) established for the off-site material stream using the procedure specified in §63.694(e) of this subpart. The MR for the off-site material streams shall be determined using the procedures specified in §63.694(f) of this subpart.

(3) *HAP reduction efficiency.* For any treatment process except a treatment process that uses biological degradation and is performed in an open tank or surface impoundment, the treatment process must achieve the applicable performance level specified in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.

(i) In the case when the owner or operator determines that off-site material stream entering the treatment process has an average VOHAP concentration less than 10,000 ppmw at the point-of-delivery, then the treatment process shall achieve a performance level such that the total quantity of HAP in the off-site material stream is reduced by 95 percent or more. The HAP reduction efficiency (R) for the treatment process shall be determined using the procedure specified in §63.694(g) of this subpart. The average VOHAP concentration of the off-site material stream at the point-of-delivery shall be determined using the procedure specified in §63.694(b) of this subpart.

(ii) In the case when the off-site material stream entering the treatment process has an average VOHAP concentration equal to or greater than 10,000 ppmw at the point-of-delivery, then the treatment process shall achieve a performance level such that the total quantity of HAP in the off-site material stream is reduced by 95 percent or

more, and the average VOHAP concentration of the off-site material at the point-of-treatment is less than 100 parts per million by weight (ppmw). The HAP reduction efficiency (R) for the treatment process shall be determined using the procedure specified in §63.694(g) of this subpart. The average VOHAP concentration of the off-site material stream at the point-of-treatment shall be determined using the procedure specified in §63.694(c) of this subpart.

(4) *Biological degradation performed in an open tank or surface impoundment.* A treatment process using biological degradation and performed in an open tank or surface impoundment must achieve the performance level specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.

(i) The HAP reduction efficiency (R) for the treatment process is equal to or greater than 95 percent, and the HAP biodegradation efficiency (R_{bio}) for the treatment process is equal to or greater than 95 percent. The HAP reduction efficiency (R) shall be determined using the procedure specified in §63.694(g) of this subpart. The HAP biodegradation efficiency (R_{bio}) shall be determined in accordance with the requirements of §63.694(h) of this subpart.

(ii) The total quantity of HAP actually removed from the off-site material stream by biological degradation (MR_{bio}) shall be equal to or greater than the required mass removal (RMR) established for the off-site material stream using the procedure specified in §63.694(e) of this subpart. The MR_{bio} of the off-site material stream shall be determined using the procedures specified in §63.694(i) of this subpart.

(5) *Incineration.* The treatment process must destroy the HAP contained in the off-site material stream using one of the combustion devices specified in paragraphs (b)(5)(i) through (v) of this section.

(i) An incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270, and the incinerator is designed and operated in accordance with the requirements of 40 CFR part 264, subpart O—Incinerators, or

(ii) An incinerator for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 265, subpart O—Incinerators.

(iii) A boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270, and the combustion unit is designed and operated in accordance with the requirements of 40 CFR part 266, subpart H—Hazardous Waste Burned in Boilers and Industrial Furnaces.

(iv) A boiler or industrial furnace for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 266, subpart H Hazardous Waste Burned in Boilers and Industrial Furnaces.

(v) An incinerator, boiler, or industrial furnace for which the owner or operator has submitted a Notification of Compliance under §§63.1207(j) and 63.1210(d) and complies with the requirements of subpart EEE of this part at all times (including times when non-hazardous waste is being burned).

(c) For a treatment process that removes the HAP from the off-site material by a means other than thermal destruction or biological degradation to achieve one of the performances levels specified in paragraph (b)(1), (b)(2), or (b)(3) of this section, the owner or operator shall manage the HAP removed from the off-site material in such a manner to minimize release of these HAP to the atmosphere, to the extent practical. Examples of HAP emission control measures that meet the requirements of this paragraph include managing the HAP removed from the off-site material in units that use air emission controls in accordance with the standards specified in §§63.685 through 63.689 of this subpart, as applicable to the unit.

(d) When the owner or operator treats the off-site material to meet one of the performance levels specified in paragraphs (b)(1) through (b)(4) of this section, the owner or operator shall demonstrate that the treatment process achieves the selected performance level for the range of expected off-site material stream compositions expected to be treated. An initial demonstration shall be performed as soon as possible but no later than 30 days after first time an owner or operator begins using the treatment process to manage off-site material streams in accordance with the requirements of either §63.683(b)(1)(ii) or §63.683(b)(2)(ii) of this subpart as applicable to the affected off-site material management unit or process equipment. Thereafter, the owner or operator shall review and update, as necessary, this demonstration at least once every calendar year following the date of the initial demonstration.

(e) When the owner or operator treats the off-site material to meet one of the performance levels specified in paragraphs (b)(1) through (b)(4) of this section, the owner or operator shall ensure that the treatment process is achieving the applicable performance requirements by continuously monitoring the operation of the process when it is used to treat off-site material by complying with paragraphs (e)(1) through (e)(3) or, for biological treatment units, paragraph (e)(4) of this section:

(1) A continuous monitoring system shall be installed and operated for each treatment that measures operating parameters appropriate for the treatment process technology. This system shall include a continuous recorder that records the measured values of the selected operating parameters. The monitoring equipment shall be installed, calibrated, and maintained in accordance with the equipment manufacturer's specifications. The continuous recorder shall be a data recording device that is capable of recording either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15 minutes or less.

(2) For each monitored operating parameter, the owner or operator shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the treatment process must be operated to continuously achieve the applicable performance requirements of this section.

(3) When the treatment process is operating to treat off-site material, the owner or operator shall inspect the data recorded by the continuous monitoring system on a routine basis and operate the treatment process such that the actual value of each monitored operating parameter is greater than the minimum operating parameter value or less than the maximum operating parameter value, as appropriate, established for the treatment process.

(4) When the treatment process is a biological treatment process that is complying with paragraph (b)(4) of this section, the owner or operator must establish and implement a written procedure to monitor the appropriate parameters that demonstrate proper operation of the biological treatment unit in accordance with the evaluation required in §63.694(h) of this subpart. The written procedure must list the operating parameters that will be monitored and state the frequency of monitoring to ensure that the biological treatment unit is operating between the minimum operating parameter values and maximum operating parameter values to establish that the biological treatment unit is continuously achieving the performance requirement.

(f) The owner or operator must maintain records for each treatment process in accordance with the requirements of §63.696(a) of this subpart.

(g) The owner or operator must prepare and submit reports for each treatment process in accordance with the requirements of §63.697(a) of this subpart.

(h) The Administrator may at any time conduct or require that the owner or operator conduct testing necessary to demonstrate that a treatment process is achieving the applicable performance requirements of this section. The testing shall be conducted in accordance with the applicable requirements of this section. The Administrator may elect to have an authorized representative observe testing conducted by the owner or operator.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38967, July 20, 1999; 66 FR 1266, Jan. 8, 2001; 68 FR 37351, June 23, 2003; 80 FR 14273, Mar. 18, 2015]

§63.685 Standards: Tanks.

(a) The provisions of this section apply to the control of air emissions from tanks for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) According to the date an affected source commenced construction or reconstruction and the date an affected source receives off-site material for the first time as established in §63.680(e)(i) through (iii), the owner or operator shall control air emissions from each tank subject to this section in accordance with either paragraph (b)(1)(i) or (ii) of this section.

(1)(i) For a tank that is part of an existing affected source but the tank is not used for a waste stabilization process as defined in §63.681, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 3 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 3 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this

section. The owner or operator shall control air emissions from a tank required by Table 3 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(ii) For a tank that is part of an existing affected source but the tank is not used for a waste stabilization process as defined in §63.681, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 4 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 4 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 4 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(2) For a tank that is part of a new affected source but the tank is not used for a waste stabilization process as defined in §63.681, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 5 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 5 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 5 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(3) For a tank that is used for a waste stabilization process, the owner or operator shall control air emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(c) Owners and operators controlling air emissions from a tank using Tank Level 1 controls shall meet the following requirements:

(1) The owner or operator shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in §63.694(j). Thereafter, the owner or operator shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3, Table 4, or Table 5 of this subpart, as applicable to the tank.

(2) The owner or operator must control air emissions from the tank in accordance with the requirements in either paragraph (c)(2)(i), (c)(2)(ii), or (c)(2)(iii) of this section, as applicable to the tank.

(i) The owner or operator controls air emissions from the tank in accordance with the provisions specified in subpart OO of this part—National Emission Standards for Tanks—Level 1, except that §63.902(c)(2) and (3) shall not apply for the purposes of this subpart.

(ii) As an alternative to meeting the requirements in paragraph (c)(2)(i) of this section, an owner or operator may control air emissions from the tank in accordance with the provisions for Tank Level 2 controls as specified in paragraph (d) of this section.

(iii) As an alternative to meeting the requirements in paragraph (c)(2)(i) of this section when a tank is used as an interim transfer point to transfer off-site material from containers to another off-site material management unit, an owner or operator may control air emissions from the tank in accordance with the requirements in paragraphs (c)(2)(iii)(A) and (c)(2)(iii)(B) of this section. An example of such a tank is an in-ground tank into which organic-contaminated debris is dumped from roll-off boxes or dump trucks, and then this debris is promptly transferred from the tank to a macroencapsulation unit by a backhoe.

(A) During those periods of time when the material transfer activity is occurring, the tank may be operated without a cover.

(B) At all other times, air emissions from the tank must be controlled in accordance with the provisions specified in subpart OO of this part—National Emission Standards for Tanks—Level 1, with the exceptions specified in paragraphs (c)(2)(iii)(B)(*1*) and (*2*) of this section.

(*1*) Where §63.902(c)(2) provides an exception for a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere, only a conservation vent shall be eligible for the exception for the purposes of this subpart.

(*2*) Section 63.902(c)(3) shall not apply for the purposes of this subpart.

(d) Owners and operators controlling air emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in paragraph (e) of this section;

(2) A tank equipped with an external floating roof in accordance with the requirements specified in paragraph (f) of this section;

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;

(4) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or

(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in paragraph (i) of this section.

(e) The owner or operator who elects to control air emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in §63.681 of this subpart; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact 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.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) 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.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (i.e., no visible gaps). Rim spaces vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified in §63.695(b) of this subpart.

(f) The owner or operator who elects to control tank emissions by using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.

(1) The owner or operator shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in §63.681 of this subpart. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters (24 inches) above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).

(iii) The external floating roof shall be meet the following specifications:

(A) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float wells shall be equipped with covers designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vents shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device must be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified in §63.695(b) of this subpart.

(g) The owner or operator who controls tank air emissions by venting to a control device shall meet the requirements specified in paragraphs (g)(1) through (g)(3) of this section.

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed

roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §63.693 of this subpart.

(2) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except that venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(ii) To remove accumulated sludge or other residues from the bottom of the tank.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the procedures specified in §63.695 of this subpart.

(h) The owner or operator who elects to control tank air emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in §63.694(k) of this subpart.

(3) Whenever an off-site material is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except at those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of §63.693.

(i) The owner or operator who elects to control air emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in paragraphs (i)(1) through (3) of this section.

(1) The tank shall be located inside an enclosure. The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or to direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure” initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in §63.693 of this subpart.

(3) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in §63.693.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38968, July 20, 1999; 66 FR 1266, Jan. 8, 2001; 80 FR 14273, Mar. 18, 2015]

§63.686 Standards: Oil-water and organic-water separators.

(a) The provisions of this section apply to the control of air emissions from oil-water separators and organic-water separators for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each separator subject to this section by using one of the following:

(1) A floating roof in accordance with all applicable provisions specified in subpart VV of this part—National Emission Standards for Oil-Water Separators and Organic-Water Separators, except that §§63.1043(c)(2), 63.1044(c)(2), and 63.1045(b)(3)(i) shall not apply for the purposes of this subpart. For portions of the separator where it is infeasible to install and operate a floating roof, such as over a weir mechanism, the owner or operator shall comply with the requirements specified in paragraph (b)(2) of this section.

(2) A fixed-roof that is vented through a closed-vent system to a control device in accordance with all applicable provisions specified in subpart VV of this part—National Emission Standards for Oil-Water Separators and Organic-Water Separators, except that §§63.1043(c)(2), 63.1044(c)(2), and 63.1045(b)(3)(i) shall not apply for the purposes of this subpart.

(3) A pressurized separator that operates as a closed system in accordance with all applicable provisions specified in subpart VV of this part—National Emission Standards for Oil-Water Separators and Organic-Water Separators, except that §§63.1043(c)(2), 63.1044(c)(2), and 63.1045(b)(3)(i) shall not apply for the purposes of this subpart.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38969, July 20, 1999; 80 FR 14274, Mar. 18, 2015]

§63.687 Standards: Surface impoundments.

(a) The provisions of this section apply to the control of air emissions from surface impoundments for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each surface impoundment subject to this section by using one of the following:

(1) A floating membrane cover in accordance with the applicable provisions specified in subpart QQ of this part—National Emission Standards for Surface Impoundments, except that §§63.942(c)(2) and (3) and 63.943(c)(2) shall not apply for the purposes of this subpart; or

(2) A cover that is vented through a closed-vent system to a control device in accordance with all applicable provisions specified in subpart QQ of this part—National Emission Standards for Surface Impoundments, except that §§63.942(c)(2) and (3) and 63.943(c)(2) shall not apply for the purposes of this subpart.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38969, July 20, 1999; 80 FR 14274, Mar. 18, 2015]

§63.688 Standards: Containers.

(a) The provisions of this section apply to the control of air emissions from containers for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air emissions from each container subject to this section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in paragraph (c) of this section apply to the container.

(1) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 1 controls as specified in subpart PP of this part—National Emission Standards for Containers, except that §§63.922(d)(4) and (5) and 63.923(d)(4) and (5) shall not apply for the purposes of this subpart.

(ii) As an alternative to meeting the requirements in paragraph (b)(1)(i) of this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for either Container Level 2 controls or Container Level 3 controls as specified in subpart PP of this part—National Emission Standards for Containers, except that §§63.922(d)(4) and (5) and 63.923(d)(4) and (5) shall not apply for the purposes of this subpart.

(2) For a container having a design capacity greater than 0.46 m^3 and the container is not in light-material service as defined in §63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(3) For a container having a design capacity greater than 0.46 m^3 and the container is in light-material service as defined in §63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 2 controls as specified in subpart PP of this part—National Emission Standards for Containers, except that §§63.922(d)(4) and (5) and 63.923(d)(4) and (5) shall not apply for the purposes of this subpart.

(ii) As an alternative to meeting the requirements in paragraph (b)(3)(i) of this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP—National Emission Standards for Containers.

(c) When a container subject to this subpart and having a design capacity greater than 0.1 m^3 is used for treatment of an off-site material by a waste stabilization process as defined in §63.681 of this subpart, the owner or operator shall control air emissions from the container at those times during the process when the off-site material in the container is exposed to the atmosphere in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP—National Emission Standards for Containers.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38969, July 20, 1999; 80 FR 14274, Mar. 18, 2015]

§63.689 Standards: Transfer systems.

(a) The provisions of this section apply to the control of air emissions from transfer systems for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.

(b) For each transfer system that is subject to this section and is an individual drain system, the owner or operator shall control air emissions in accordance with the standards specified in 40 CFR part 63, subpart RR—National Emission Standards for Individual Drain Systems.

(c) For each transfer system that is subject to this section but is not an individual drain system, the owner or operator shall control air emissions by using one of the transfer systems specified in paragraphs (c)(1) through (c)(3) of this section.

(1) A transfer system that uses covers in accordance with the requirements specified in paragraph (d) of this section.

(2) A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(3) A transfer system that is enclosed and vented through a closed-vent system to a control device in accordance with the requirements specified in paragraphs (c)(3)(i) and (c)(3)(ii) of this section.

(i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and

(ii) The closed-vent system and control device are designed and operated in accordance with the requirements of §63.693 of this subpart.

(d) Owners and operators controlling air emissions from a transfer system using covers in accordance with the provisions of paragraph (c)(1) of this section shall meet the requirements specified in paragraphs (d)(1) through (d)(6) of this section.

(1) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the off-site material as it is conveyed by the transfer system except for the openings at the inlet and outlet to the transfer system through which the off-site material passes. The inlet and outlet openings used for passage of the off-site material through the transfer system shall be the minimum size required for practical operation of the transfer system.

(2) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section joints or between the interface of the cover edge and its mounting.

(3) Except for the inlet and outlet openings to the transfer system through which the off-site material passes, each opening in the cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device.

(4) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the material or its vapors conveyed in the transfer system; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the transfer system on which the cover is installed.

(5) Whenever an off-site material is in the transfer system, the cover shall be installed with each closure device secured in the closed position, except the opening of closure devices or removal of the cover is allowed to provide access to the transfer system for performing routine inspection, maintenance, repair, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a hatch or remove the cover to repair conveyance equipment mounted under the cover or to clear a blockage of material inside the system. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable.

(6) The owner or operator shall inspect the air emission control equipment in accordance with the requirements specified in §63.695 of this subpart.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38970, July 20, 1999; 80 FR 14275, Mar. 18, 2015]

§63.690 Standards: Process vents.

(a) The provisions of this section apply to the control of air emissions from process vents for which §63.683(c)(1)(i) of this subpart references the use of this section for such air emission control.

(b) The owner or operator must route the vent stream from each affected process vent through a closed-vent system to a control device that meets the standards specified in §63.693 of this subpart. For the purpose of complying with this paragraph (b), a primary condenser is not a control device; however, a second condenser or other organic recovery device that is operated downstream of the primary condenser is considered a control device.

[64 FR 38970, July 20, 1999]

§63.691 Standards: Equipment leaks.

(a) The provisions of this section apply to the control of air emissions from equipment leaks for which §63.683(d) references the use of this section for such air emissions control.

(b) According to the date an affected source commenced construction or reconstruction and the date an affected source receives off-site material for the first time, as established in §63.680(e)(i) through (iii), the owner or operator shall control the HAP emitted from equipment leaks in accordance with the applicable provisions specified in either paragraph (b)(1) or (2) of this section.

(1)(i) The owner or operator controls the HAP emitted from equipment leaks in accordance with §§61.241 through 61.247 in 40 CFR part 61, subpart V—National Emission Standards for Equipment Leaks, with the difference noted in paragraphs (b)(1)(iii) and (iv) of this section for the purposes of this subpart; or

(ii) The owner or operator controls the HAP emitted from equipment leaks in accordance with §§63.161 through 63.182 in subpart H of this part—National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks, with the differences noted in paragraphs (b)(2)(i) through (iv) of this section for the purposes of this subpart.

(iii) On or after March 18, 2015, for the purpose of complying with the requirements of 40 CFR 61.242-6(a)(2) or the requirements of §63.167(a)(2), the open end is sealed when instrument monitoring of the open-ended valve or line conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 ppm or greater.

(iv) On or after March 18, 2015, for the purpose of complying with the requirements of 40 CFR 61.242-6(d) or the requirements of §63.167(d), open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset and that are exempt from the requirements in 40 CFR 61.242-6(a), (b), and (c) or §63.167(a), (b), and (c) must comply with the requirements in §63.693(c)(2).

(2) The owner or operator controls the HAP emitted from equipment leaks in accordance with §§63.161 through 63.183 in subpart H of this part—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, with the differences noted in paragraphs (b)(2)(i) through (v) of this section for the purposes of this subpart.

(i) For each valve in gas/vapor or in light liquid service, as defined in §63.681, that is part of an affected source under this subpart, an instrument reading that defines a leak is 500 ppm or greater as detected by Method 21 of 40 CFR part 60, appendix A.

(ii) For each pump in light liquid service, as defined in §63.681, that is part of an affected source under this subpart, an instrument reading that defines a leak is 1,000 ppm or greater as detected by Method 21 of 40 CFR part 60, appendix A. Repair is not required unless an instrument reading of 2,000 ppm or greater is detected.

(iii) On or after March 18, 2015, for the purpose of complying with the requirements of §63.167(a)(2), the open end is sealed when instrument monitoring of the open-ended valve or line conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 ppm or greater.

(iv) On or after March 18, 2015, for the purpose of complying with the requirements of §63.167(d), open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset and that are exempt from the requirements in §63.167(a), (b), and (c) must comply with the requirements in §63.693(c)(2).

(v) For the purposes of this subpart, the pressure relief device requirements of §63.691(c) of this subpart rather than those of §63.165 or of 40 CFR 61.242-4, as applicable, shall apply. The pressure relief device requirements of §63.691(c)(3) and (4) apply in addition to the requirements of §63.169 or of 40 CFR 61.242-8, as applicable, for pressure relief devices in liquid service.

(c) *Requirements for pressure relief devices.* Except as provided in paragraph (c)(4) of this section, the owner or operator must comply with the requirements specified in paragraphs (c)(1) through (3) of this section for pressure relief devices in off-site material service.

(1) *Operating requirements.* Except during a pressure release event, operate each pressure relief device in gas/vapor service with an instrument reading of less than 500 ppm above background as detected by Method 21 of 40 CFR part 60, appendix A.

(2) *Pressure release requirements.* For pressure relief devices in gas/vapor service, the owner or operator must comply with either paragraph (c)(2)(i) or (ii) of this section following a pressure release, as applicable.

(i) If the pressure relief device does not consist of or include a rupture disk, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 ppm above background, as detected by Method 21 of 40 CFR part 60, appendix A, no later than 5 calendar days after the pressure release device returns to off-site material service following a pressure release, except as provided in §63.171.

(ii) If the pressure relief device consists of or includes a rupture disk, except as provided in §63.171, install a replacement disk as soon as practicable but no later than 5 calendar days after the pressure release.

(3) *Pressure release management.* Except as provided in paragraph (c)(4) of this section, emissions of HAP listed in Table 1 of this subpart may not be discharged directly to the atmosphere from pressure relief devices in off-site material service, and according to the date an affected source commenced construction or reconstruction and the date an affected source receives off-site material for the first time, as established in §63.680(e)(1)(i) through (iii), the owner or operator must comply with the requirements specified in paragraphs (c)(3)(i) and (ii) of this section for all pressure relief devices in off-site material service.

(i) The owner or operator must equip each pressure relief device in off-site material service with a device(s) or use a monitoring system. The device or monitoring system may be either specific to the pressure release device itself or may be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices or monitoring systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, pressure monitor, or parametric monitoring system. The devices or monitoring systems must be capable of meeting the requirements specified in paragraphs (c)(3)(i)(A) through (C) of this section.

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring.

(ii) If any pressure relief device in off-site material service releases directly to the atmosphere as a result of a pressure release event, the owner or operator must calculate the quantity of HAP listed in Table 1 of this subpart released during each pressure release event and report this quantity as required in §63.697(b)(5). Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge.

(4) *Pressure relief devices routed to a drain system, fuel gas system, process or control device.* If a pressure relief device in off-site material service is designed and operated to route all pressure releases through a closed vent system to a drain system, fuel gas system, process or control device, paragraphs (c)(1), (2), and (3) of this section do not apply. The fuel gas system or closed vent system and the process or control device (if applicable) must meet the requirements of §63.693. The drain system (if applicable) must meet the requirements of §63.689.

[64 FR 38970, July 20, 1999, as amended at 66 FR 1266, Jan. 8, 2001; 80 FR 14275, Mar. 18, 2015]

§63.692 [Reserved]

§63.693 Standards: Closed-vent systems and control devices.

(a) The provisions of this section apply to closed-vent systems and control devices used to control air emissions for which another standard references the use of this section for such air emission control.

(b) For each closed-vent system and control device used to comply with this section, the owner or operator shall meet the following requirements:

(1) The owner or operator must use a closed-vent system that meets the requirements specified in paragraph (c) of this section.

(2) The owner or operator must use a control device that meets the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.

(3) Whenever gases or vapors containing HAP are routed from a tank through a closed-vent system connected to a control device used to comply with the requirements of §63.685(b)(1), (2), or (3), the control device must be operating except as provided for in paragraphs (b)(3)(i) and (ii) of this section.

(i) The control device may only be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that tank emissions are vented to the control device.

(ii) On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance shall not exceed 240 hours per each calendar year.

(4) The owner or operator must inspect and monitor each closed-vent system in accordance with the requirements specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.

(i) The owner or operator inspects and monitors the closed-vent system in accordance with the requirements specified in §63.695(c) of this subpart, and complies with the applicable recordkeeping requirements in §63.696 of this subpart and the applicable reporting requirements in §63.697 of this subpart.

(ii) As an alternative to meeting the requirements specified in paragraph (b)(4)(i) of this section, the owner or operator may choose to inspect and monitor the closed-vent system in accordance with the requirements under 40 CFR part 63, subpart H—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks as specified in 40 CFR 63.172(f) through (h), and complies with the applicable recordkeeping requirements in 40 CFR 63.181 and the applicable reporting requirements in 40 CFR 63.182.

(5) The owner or operator must monitor the operation of each control device in accordance with the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.

(6) The owner or operator shall maintain records for each control device in accordance with the requirements of §63.696 of this subpart.

(7) The owner or operator shall prepare and submit reports for each control device in accordance with the requirements of §63.697 of this subpart.

(8) In the case when an owner or operator chooses to use a design analysis to demonstrate compliance of a control device with the applicable performance requirements specified in this section as provided for in paragraphs (d) through (g) of this section, the Administrator may require that the design analysis be revised or amended by the owner or operator to correct any deficiencies identified by the Administrator. If the owner or operator and the Administrator do not agree on the acceptability of using the design analysis (including any changes required by the Administrator) to demonstrate that the control device achieves the applicable performance requirements, then the disagreement must be resolved using the results of a performance test conducted by the owner or operator in accordance with the requirements of §63.694(l). The Administrator may choose to have an authorized representative observe the performance test conducted by the owner or operator. Should the results of this performance test not agree with the determination of control device performance based on the design analysis, then the results of the performance test will be used to establish compliance with this subpart.

(c) Closed-vent system requirements.

(1) The vent stream required to be controlled shall be conveyed to the control device by either of the following closed-vent systems:

(i) A closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in §63.694(k) of this subpart; or

(ii) A closed-vent system that is designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(2) In situations when the closed-vent system includes bypass devices that could be used to divert a vent stream from the closed-vent system to the atmosphere at a point upstream of the control device inlet, each bypass device must be equipped with either a flow indicator as specified in paragraph (c)(2)(i) of this section or a seal or locking device as specified in paragraph (c)(2)(ii) of this section, except as provided for in paragraph (c)(2)(iii) of this section:

(i) If a flow indicator is used, the indicator must be installed at the entrance to the bypass line used to divert the vent stream from the closed-vent system to the atmosphere. The flow indicator must indicate a reading at least once every 15 minutes. The owner or operator must maintain records of the following information: hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour; and records of all periods when flow is detected or the flow indicator is not operating.

(ii) If a seal or locking device is used to comply with paragraph (c)(2) of this section, the device shall be placed on the mechanism by which the bypass device position is controlled (*e.g.,* valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve.

(iii) Equipment needed for safety reasons, including low leg drains, open-ended valves and lines not in emergency shutdown systems, and pressure relief devices subject to the requirements of §63.691(c) are not subject to the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(d) Carbon adsorption control device requirements.

(1) The carbon adsorption system must achieve the performance specifications in either paragraph (d)(1)(i) or (d)(1)(ii) of this section.

(i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the carbon adsorption system; or

(ii) Recover 95 percent or more, on a weight-basis, of the total HAP listed in Table 1 of this subpart contained in the vent stream entering the carbon adsorption system.

(2) The owner or operator must demonstrate that the carbon adsorption system achieves the performance requirements in paragraph (d)(1) of this section by either performing a performance test as specified in paragraph (d)(2)(i) of this section or a design analysis as specified in paragraph (d)(2)(ii) of this section.

(i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of §63.694(l) of this subpart.

(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (d)(2)(ii)(A) or (d)(2)(ii)(B) of this section as applicable to the carbon adsorption system design.

(A) For a regenerable carbon adsorption system, the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration steam flow over the period of

each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of the carbon.

(B) For a nonregenerable carbon adsorption system (e.g., a carbon canister), the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, carbon bed capacity, activated carbon type and working capacity, and design carbon replacement interval based on the total carbon working capacity of the control device and emission point operating schedule.

(3) The owner or operator must monitor the operation of the carbon adsorption system in accordance with the requirements of §63.695(e) using one of the continuous monitoring systems specified in paragraphs (d)(3)(i) through (iii) of this section. Monitoring the operation of a nonregenerable carbon adsorption system (*e.g.,* a carbon canister) using a continuous monitoring system is not required when the carbon canister or the carbon in the control device is replaced on a regular basis according to the requirements in paragraph (d)(4)(iii) of this section.

(i) For a regenerative-type carbon adsorption system:

(A) A continuous parameter monitoring system to measure and record the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle. The integrating regenerating stream flow monitoring device must have an accuracy of ±10 percent; and

(B) A continuous parameter monitoring system to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and to measure the actual carbon bed temperature after regeneration and within 15 minutes of completing the cooling cycle. The accuracy of the temperature monitoring device must be ±1 percent of the temperature being measured, expressed in degrees Celsius or ±5 °C, whichever is greater.

(ii) A continuous monitoring system to measure and record the daily average concentration level of organic compounds in the exhaust gas stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.

(iii) A continuous monitoring system that measures other alternative operating parameters upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(4) The owner or operator shall manage the carbon used for the carbon adsorption system, as follows:

(i) Following the initial startup of the control device, all carbon in the control device shall be replaced with fresh carbon on a regular, predetermined time interval that is no longer than the carbon service life established for the carbon adsorption system. The provisions of this paragraph (d)(4)(i) do not apply to a nonregenerable carbon adsorption system (*e.g.,* a carbon canister) for which the carbon canister or the carbon in the control device is replaced on a regular basis according to the requirements in paragraph (d)(4)(iii) of this section.

(ii) The spent carbon removed from the carbon adsorption system must be either regenerated, reactivated, or burned in one of the units specified in paragraphs (d)(4)(ii)(A) through (d)(4)(ii)(G) of this section.

(A) Regenerated or reactivated in a thermal treatment unit for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart X.

(B) Regenerated or reactivated in a thermal treatment unit equipped with and operating air emission controls in accordance with this section.

(C) Regenerated or reactivated in a thermal treatment unit equipped with and operating organic air emission controls in accordance with a national emission standard for hazardous air pollutants under another subpart in 40 CFR part 63 or 40 CFR part 61.

(D) Burned in a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart O.

(E) Burned in a hazardous waste incinerator for which the owner or operator has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.

(F) Burned in a boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 266, subpart H.

(G) Burned in a boiler or industrial furnace for which the owner or operator has designed and operates the unit in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) As an alternative to meeting the requirements in paragraphs (d)(3) and (d)(4)(i) of this section, an owner or operator of a nonregenerable carbon adsorption system may choose to replace on a regular basis the carbon canister or the carbon in the control device using the procedures in either paragraph (d)(4)(iii)(A) or (d)(4)(iii)(B) of this section. For the purpose of complying with this paragraph (d)(4)(iii), a nonregenerable carbon adsorption system means a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device, such as a carbon canister. The spent carbon removed from the nonregenerable carbon adsorption system must be managed according to the requirements in paragraph (d)(4)(ii) of this section.

(A) Monitor the concentration level of the organic compounds in the exhaust vent from the carbon adsorption system on a regular schedule, and when carbon breakthrough is indicated, immediately replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon. Measurement of the concentration level of the organic compounds in the exhaust vent stream must be made with a detection instrument that is appropriate for the composition of organic constituents in the vent stream and is routinely calibrated to measure the organic concentration level expected to occur at breakthrough. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of paragraph (d)(2)(ii)(B) of this section, whichever is longer.

(B) Replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of paragraph (d)(2)(ii)(B) of this section.

(e) Condenser control device requirements.

(1) The condenser must achieve the performance specifications in either paragraph (e)(1)(i) or (e)(1)(ii) of this section.

(i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the condenser; or

(ii) Recover 95 percent or more, on a weight-basis, of the total HAP, listed in Table 1 of this subpart, contained in the vent stream entering the condenser.

(2) The owner or operator must demonstrate that the condenser achieves the performance requirements in paragraph (e)(1) of this section by either performing a performance test as specified in paragraph (e)(2)(i) of this section or a design analysis as specified in paragraph (e)(2)(ii) of this section.

(i) An owner or operator choosing to use a performance tests to demonstrate compliance must conduct the test in accordance with the requirements of §63.694(l) of this subpart.

(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the following information: description of the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature; and specification of the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

(3) The owner or operator must monitor the operation of the condenser in accordance with the requirements of §63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (e)(3)(i) through (e)(3)(iii) of this section.

(i) A continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device shall be ±1 percent of the temperature being measured, expressed in degrees Celsius or ±5 °C, whichever is greater.

(ii) A continuous monitoring system to measure and record the daily average concentration level of organic compounds in the exhaust gas stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.

(iii) A continuous monitoring system that measures other alternative operating parameters upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(f) Vapor incinerator control device requirements.

(1) The vapor incinerator must achieve the performance specifications in either paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this section.

(i) Destroy the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the vapor incinerator either:

(A) By 95 percent or more, on a weight-basis, or

(B) To achieve a total incinerator outlet concentration for the TOC, less methane and ethane, of less than or equal to 20 ppmv on a dry basis corrected to 3 percent oxygen.

(ii) Destroy the HAP listed in Table 1 of this subpart contained in the vent stream entering the vapor incinerator either:

(A) By 95 percent or more, on a total HAP weight-basis, or

(B) To achieve a total incinerator outlet concentration for the HAP, listed in Table 1 of this subpart, of less than or equal to 20 ppmv on a dry basis corrected to 3 percent oxygen.

(iii) Maintain the conditions in the vapor incinerator combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher.

(2) The owner or operator must demonstrate that the vapor incinerator achieves the performance requirements in paragraph (f)(1) of this section by conducting either a performance test as specified in paragraph (f)(2)(i) of this section or a design analysis as specified in paragraph (f)(2)(ii) of this section, except as provided for in paragraph (f)(2)(iii) of this section.

(i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of §63.694(l) of this subpart.

(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (f)(2)(ii)(A) or (f)(2)(ii)(B) of this section as applicable to the vapor incinerator design.

(A) For a thermal vapor incinerator, the design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures in the combustion chamber and the combustion chamber residence time.

(B) For a catalytic vapor incinerator, the design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures across the catalyst bed inlet and outlet, and the design service life of the catalyst.

(iii) An owner or operator is not required to conduct a performance test or design analysis if the incinerator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(3) The owner or operator must monitor the operation of the vapor incinerator in accordance with the requirements of §63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (f)(3)(i) through (f)(3)(iv) of this section as applicable to the type of vapor incinerator used.

(i) For a thermal vapor incinerator, a continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device must be ±1 percent of the temperature being measured, expressed in degrees Celsius of ±0.5 °C, whichever is greater.

(ii) For a catalytic vapor incinerator, a temperature monitoring device capable of monitoring temperature at two locations equipped with a continuous recorder. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(iii) For either type of vapor incinerator, a continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.

(iv) For either type of vapor incinerator, a continuous monitoring system that measures alternative operating parameters other than those specified in paragraph (f)(3)(i) or (f)(3)(ii) of this section upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(g) Boilers and process heaters control device requirements.

(1) The boiler or process heater must achieve the performance specifications in either paragraph (g)(1)(i), (g)(1)(ii), (g)(1)(iii), (g)(1)(iv), or (g)(1)(v) of this section.

(i) Destroy the total organic compounds (TOC), less methane and ethane, contained in the vent stream introduced into the flame zone of the boiler or process heater either:

(A) By 95 percent or more, on a weight-basis, or

(B) To achieve in the exhausted combustion gases a total concentration for the TOC, less methane and ethane, of less than or equal to 20 parts ppmv on a dry basis corrected to 3 percent oxygen.

(ii) Destroy the HAP listed in Table 1 of this subpart contained in the vent stream entering the vapor incinerator either:

(A) By 95 percent or more, on a total HAP weight-basis, or

(B) To achieve in the exhausted combustion gases a total concentration for the HAP, listed in Table 1 of the subpart, of less than or equal to 20 ppmv on a dry basis corrected to 3 percent oxygen.

(iii) Introduce the vent stream into the flame zone of the boiler or process heater and maintain the conditions in the combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher.

(iv) Introduce the vent stream with the fuel that provides the predominate heat input to the boiler or process heater (i.e., the primary fuel); or

(v) Introduce the vent stream to a boiler or process heater for which the owner or operator either has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H; or has submitted a

Notification of Compliance under §§63.1207(j) and 63.1210(d) and complies with the requirements of subpart EEE of this part at all times (including times when non-hazardous waste is being burned).

(2) The owner or operator must demonstrate that the boiler or process heater achieves the performance specifications in paragraph (g)(1) of this section chosen by the owner or operator using the applicable method specified in paragraph (g)(2)(i) or (g)(2)(ii) of this section.

(i) If an owner or operator chooses to comply with the performance specifications in either paragraph (g)(1)(i), (ii), or (iii) of this section, the owner or operator must demonstrate compliance with the applicable performance specifications by conducting either a performance test as specified in paragraph (g)(2)(i)(A) of this section or a design analysis as specified in paragraph (g)(2)(i)(B) of this section, except as provided for in paragraph (g)(2)(i)(C) of this section.

(A) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of §63.694(l) of this subpart.

(B) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the following information: description of the vent stream composition, constituent concentrations, and flow rate; specification of the design minimum and average flame zone temperatures and combustion zone residence time; and description of the method and location by which the vent stream is introduced into the flame zone.

(C) An owner or operator is not required to conduct a performance test or design analysis if the boiler or process heater has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(ii) If an owner or operator chooses to comply with the performance specifications in either paragraph (g)(1)(iv) or (g)(1)(v) of this section, the owner or operator must demonstrate compliance by maintaining the records that document that the boiler or process heater is designed and operated in accordance with the applicable requirements of this section.

(3) For a boiler or process heater complying with the performance specifications in either paragraph (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this section, the owner or operator must monitor the operation of a boiler or process heater in accordance with the requirements of §63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (g)(3)(i) through (g)(3)(iii) of this section.

(i) A continuous parameter monitoring system to measure and record the daily average combustion zone temperature. The accuracy of the temperature sensor must be ±1 percent of the temperature being measured, expressed in degrees Celsius or ±0.5 °C, whichever is greater;

(ii) A continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.

(iii) A continuous monitoring system that measures alternative operating parameters other than those specified in paragraph (g)(3)(i) or (g)(3)(ii) of this section upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(h) Flare control device requirements.

(1) The flare must be designed and operated in accordance with the requirements in 40 CFR 63.11(b).

(2) The owner or operator must demonstrate that the flare achieves the requirements in paragraph (h)(1) of this section by performing the procedures specified in paragraph (h)(2)(i) of this section. A previous compliance demonstration for the flare that meets all of the conditions specified in paragraph (h)(2)(ii) of this section may be used by an owner or operator to demonstrate compliance with this paragraph (h)(2).

(i) To demonstrate that a flare achieves the requirements in paragraph (h)(1) of this section, the owner or operator performs all of the procedures specified in paragraphs (h)(2)(i)(A) through (h)(2)(i)(C) of this section.

(A) The owner or operator conducts a visible emission test for the flare in accordance with the requirements specified in 40 CFR 63.11(b)(4).

(B) The owner or operator determines the net heating value of the gas being combusted in the flare in accordance with the requirements specified in 40 CFR 63.11(b)(6); and

(C) The owner or operator determines the flare exit velocity in accordance with the requirements applicable to the flare design as specified in 40 CFR 63.11(b)(7) or 40 CFR 63.11(b)(8).

(ii) A previous compliance demonstration for the flare may be used by an owner or operator to demonstrate compliance with paragraph (h)(2) of this section provided that all conditions for the compliance determination and subsequent flare operation are met as specified in paragraphs (h)(2)(ii)(A) and (h)(2)(ii)(B) of this section.

(A) The owner or operator conducted the compliance determination using the procedures specified in paragraph (h)(2)(i) of this section.

(B) No flare operating parameter or process changes have occurred since completion of the compliance determination which could affect the compliance determination results.

(3) The owner or operator must monitor the operation of the flare using a heat sensing monitoring device (including but not limited to a thermocouple, ultraviolet beam sensor, or infrared sensor) that continuously detects the presence of a pilot flame. The owner or operator must record, for each 1-hour period, whether the monitor was continuously operating and whether a pilot flame was continuously present during each hour as required in §63.696(b)(3) of this subpart.

[64 FR 38970, July 20, 1999, as amended at 66 FR 1266, Jan. 8, 2001; 68 FR 37351, June 23, 2003; 80 FR 14276, Mar. 18, 2015]

§63.694 Testing methods and procedures.

(a) This section specifies the testing methods and procedures required for this subpart to perform the following:

(1) To determine the average VOHAP concentration for off-site material streams at the point-of-delivery for compliance with standards specified §63.683 of this subpart, the testing methods and procedures are specified in paragraph (b) of this section.

(2) To determine the average VOHAP concentration for treated off-site material streams at the point-of-treatment for compliance with standards specified §63.684 of this subpart, the testing methods and procedures are specified in paragraph (c) of this section.

(3) To determine the treatment process VOHAP concentration limit (C_R) for compliance with standards specified §63.684 of this subpart, the testing methods and procedures are specified in paragraph (d) of this section.

(4) To determine treatment process required HAP removal rate (RMR) for compliance with standards specified §63.684 of this subpart, the testing methods and procedures are specified in paragraph (e) of this section.

(5) To determine treatment process actual HAP removal rate (MR) for compliance with standards specified §63.684 of this subpart, the testing methods and procedures are specified in paragraph (f) of this section.

(6) To determine treatment process required HAP reduction efficiency (R) for compliance with standards specified in §63.684 of this subpart, the testing methods and procedures are specified in paragraph (g) of this section.

(7) To determine treatment process required HAP biodegradation efficiency (R_{bio}) for compliance with standards specified in §63.684 of this subpart, the testing methods and procedures are specified in paragraph (h) of this section.

(8) To determine treatment process required actual HAP mass removal rate (MR_{bio}) for compliance with standards specified in§63.684 of this subpart, the testing methods and procedures are specified in paragraph (i) of this section.

(9) To determine maximum organic HAP vapor pressure of off-site materials in tanks for compliance with the standards specified in §63.685 of this subpart, the testing methods and procedures are specified in paragraph (j) of this section.

(10) To determine no detectable organic emissions, the testing methods and procedures are specified in paragraph (k) of this section.

(11) To determine closed-vent system and control device performance for compliance with the standards specified in §63.693 of this subpart, the testing methods and procedures are specified in paragraph (l) of this section.

(12) To determine process vent stream flow rate and total organic HAP concentration for compliance with the standards specified in §63.693 of this subpart, the testing methods and procedures are specified in paragraph (m) of this section.

(b) Testing methods and procedures to determine average VOHAP concentration of an off-site material stream at the point-of-delivery.

(1) The average VOHAP concentration of an off-site material at the point-of-delivery shall be determined using either direct measurement as specified in paragraph (b)(2) of this section or by knowledge as specified in paragraph (b)(3) of this section.

(2) *Direct measurement to determine VOHAP concentration*—(i) *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.

(ii) *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 this subpart:

(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 this subpart, 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:

(*1*) 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.

(*2*) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.

(*3*) 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:

(*1*) 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.

(*2*) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.

(*3*) 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.

(iii) *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 paragraph (b)(2)(ii) of this section and the following equation. An owner or operator using a test method that provides species-specific chemical concentrations 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 (f_{m305}) listed in Table 1 of this subpart.

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

Where:

C = Average VOHAP concentration of the off-site material at the point-of-delivery on a mass-weighted basis, ppmw.

i = Individual sample “i” of the off-site material.

n = Total number of samples of the off-site material collected (at least 4) for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of off-site material stream represented by C_i, kg/hr.

Q_T = Total mass quantity of off-site material during the averaging period, kg/hr.

C_i = Measured VOHAP concentration of sample “i” as determined in accordance with the requirements of §63.694(a), ppmw.

(3) Knowledge of the off-site material to determine VOHAP concentration.

(i) Documentation shall be prepared that presents the information used as the basis for the owner's or operator'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.

(ii) If test data are used as the basis for knowledge, then the owner or operator 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, an owner or operator 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 of this part as the basis for knowledge of the off-site material.

(iii) An owner or operator using species-specific chemical concentration test data 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 (f_{m305}) listed in Table 1 of this subpart.

(iv) In the event that the Administrator and the owner or operator 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 paragraph (b)(2) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Administrator may perform or require that the owner or operator perform this determination using direct measurement.

(c) Determination of average VOHAP concentration of an off-site material stream at the point-of-treatment.

(1) *Sampling.* Samples of the off-site material stream shall be collected at the point-of-treatment 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.

(i) 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.

(ii) 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 treatment process. Examples of such normal variations are seasonal variations in off-site material quantity or fluctuations in ambient temperature.

(iii) 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 methods specified in paragraphs (b)(2)(ii)(A) through (b)(2)(ii)(I) of this section, as applicable to the sampled off-site material, for the purpose of measuring the HAP listed in Table 1 of this subpart.

(3) *Calculations.* The average VOHAP concentration ($\bar{C}$) a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (c)(2) of this section and the following equation. An owner or operator using a test method that provides species-specific chemical concentrations 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 (f_{m305}) listed in Table 1 of this subpart.

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

Where:

$\bar{C}$ = Average VOHAP concentration of the off-site material on a mass-weighted basis, ppmw.

i = Individual sample “i” of the off-site material.

n = Total number of samples of the off-site material collected (at least 4) for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of off-site material stream represented by C_i, kg/hr.

Q_T = Total mass quantity of off-site material during the averaging period, kg/hr.

C_i = Measured VOHAP concentration of sample “i” as determined in accordance with the requirements of §63.694(a), ppmw.

(d) *Determination of treatment process VOHAP concentration limit* (C_R). (1) All of the off-site material streams entering the treatment process shall be identified.

(2) The average VOHAP concentration of each off-site material stream at the point-of-delivery shall be determined using the procedures specified in paragraph (b) of this section.

(3) The VOHAP concentration limit (C_R) shall be calculated by using the results determined for each individual off-site material stream and the following equation:

$$C_R = \frac{\sum_{x=1}^{m}\left(Q_x \times \bar{C}_x\right) + \sum_{y=1}^{n}\left(Q_y \times 500\ ppmw\right)}{\sum_{x=1}^{m} Q_x + \sum_{y=1}^{n} Q_y}$$

where:

C_R = VOHAP concentration limit, ppmw.

x=Individual off-site material stream “x” that has a VOHAP concentration less than 500 ppmw at the point-of-delivery.

y=Individual off-site material stream “y” that has a VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery.

m=Total number of “x” off-site material streams treated by process.

n=Total number of “y” off-site material streams treated by process.

Q_x = Total mass quantity of off-site material stream “x”, kg/yr.

Q_y = Total mass quantity of off-site material stream “y”, kg/yr.

$\bar{C}_x$ = VOHAP concentration of off-site material stream “x” at the point-of-delivery, ppmw.

(e) Determination of required HAP mass removal rate (RMR).

(1) Each individual stream containing HAP that enters the treatment process shall be identified.

(2) The average VOHAP concentration at the point-of-delivery for each stream identified in paragraph (e)(1) of this section shall be determined using the test methods and procedures specified in paragraph (b) of this section.

(3) For each stream identified in paragraph (e)(1) of this section that has an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery, the average volumetric flow rate and the density of the off-site material stream at the point-of-delivery shall be determined.

(4) The required HAP mass removal rate (RMR) shall be calculated by using the average VOHAP concentration, average volumetric flow rate, and density determined in paragraph (e)(3) of this section for each stream and the following equation:

$$RMR = \sum_{y=1}^{n}\left[V_y \times k_y \times \frac{\left(\overline{C}_y - 500\ ppmw\right)}{10^6}\right]$$

Where:

RMR = Required HAP mass removal rate, kg/hr.

y = Individual stream “y” that has a VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery as determined in §63.694(b).

n = Total number of “y” streams treated by process.

V_y = Average volumetric flow rate of stream “y” at the point-of-delivery, m^3/hr.

k_y = Density of stream “y”, kg/m^3.

$\overline{C}_y$ = Average VOHAP concentration of stream “y” at the point-of-delivery as determined in §63.694(b)(2), ppmw.

(f) Determination of actual HAP mass removal rate (MR).

(1) The actual HAP mass removal rate (MR) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be at least 1 hour.

(2) The HAP mass flow entering the process (E_b) and the HAP mass flow exiting the process (E_a) shall be determined using the test methods and procedures specified in paragraphs (g)(2) through (g)(4) of this section.

(3) The actual mass removal rate shall be calculated using the HAP mass flow rates determined in paragraph (f)(2) of this section and the following equation:

$$MR = E_b - E_a$$

where:

MR = Actual HAP mass removal rate, kg/hr.

E_b = HAP mass flow entering process as determined in paragraph (f)(2) of this section, kg/hr.

E_a = HAP mass flow exiting process as determined in paragraph (f)(2) of this section, kg/hr.

(g) Determination of treatment process HAP reduction efficiency (R).

(1) The HAP reduction efficiency (R) for a treatment process shall be determined based on results for a minimum of three consecutive runs.

(2) Each individual stream containing HAP that enters the treatment process shall be identified. Each individual stream containing HAP that exits the treatment process shall be identified. The owner or operator shall prepare a sampling plan for measuring the identified streams that accurately reflects the retention time of the material in the process.

(3) For each run, information shall be determined for each stream identified in paragraph (g)(2) of this section as specified in paragraphs (g)(3)(i) through (g)(3)(iii) of this section.

(i) The mass quantity shall be determined for each stream identified in paragraph (g)(2) of this section as entering the process (Q_b). The mass quantity shall be determined for each stream identified in paragraph (g)(2) of this section as exiting the process (Q_a).

(ii) The average VOHAP concentration at the point-of-delivery shall be determined for each stream entering the process (C_b) (as identified in paragraph (g)(2) of this section) using the test methods and procedures specified in paragraph (b) of this section.

(iii) The average VOHAP concentration at the point-of-treatment shall be determined for each stream exiting the process (C_a) (as identified in paragraph (g)(2) of this section) using the test methods and procedures specified in paragraph (c) of this section.

(4) The HAP mass flow entering the process (E_b) and the HAP mass flow exiting the process (E_a) shall be calculated using the results determined in paragraph (g)(3) of this section and the following equations:

$$E_a = \frac{1}{10^6}\sum_{j=1}^{m}\left(Q_{aj} \times \overline{C_{aj}}\right)$$

$$E_b = \frac{1}{10^6}\sum_{j=1}^{m}\left(Q_{bj} \times \overline{C_{bj}}\right)$$

Where:

E_b = HAP mass flow entering process, kg/hr.

E_a = HAP mass flow exiting process, kg/hr.

m = Total number of runs (at least 3)

j = Individual run "j"

Q_{bj} = Mass quantity of material entering process during run "j", kg/hr.

Q_{aj} = Average mass quantity of material exiting process during run "j", kg/hr.

C_{aj} = Average VOHAP concentration of material exiting process during run "j" as determined in §63.694(c), ppmw.

C_{bj} = Average VOHAP concentration of material entering process during run "j" as determined in §63.694(b)(2), ppmw.

(5) The HAP reduction efficiency (R) shall be calculated using the HAP mass flow rates determined in paragraph (g)(4) of this section and the following equation:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

Where:

R = HAP reduction efficiency, percent.

E_b = HAP mass flow entering process as determined in paragraph (g)(4) of this section, kg/hr.

E_a = HAP mass flow exiting process as determined in accordance with the requirements of paragraph (g)(4) of this section, kg/hr.

(h) Determination of HAP biodegradation efficiency (R_{bio}).

(1) The fraction of HAP biodegraded (F_{bio}) shall be determined using one of the procedures specified in appendix C of this part 63.

(2) The HAP biodegradation efficiency (R_{bio}) shall be calculated by using the following equation:

$R_{bio} - F_{bio} \times 100$

where:

R_{bio} = HAP biodegradation efficiency, percent.

F_{bio} = Fraction of HAP biodegraded as determined in paragraph (h)(1) of this section.

(i) *Determination of actual HAP mass removal rate (MR_{bio}).* (1) The actual HAP mass removal rate (MR_{bio}) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be at least 1 hour.

(2) The HAP mass flow entering the process (E_b) shall be determined using the test methods and procedures specified in paragraphs (g)(2) through (g)(4) of this section.

(3) The fraction of HAP biodegraded (F_{bio}) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this part.

(4) The actual mass removal rate shall be calculated by using the HAP mass flow rates and fraction of HAP biodegraded determined in paragraphs (i)(2) and (i)(3), respectively, of this section and the following equation:

$$MR_{bio} = E^{b} \times F_{bio}$$

Where:

MR_{bio} = Actual HAP mass removal rate, kg/hr.

E_b = HAP mass flow entering process, kg/hr.

F_{bio} = Fraction of HAP biodegraded.

(j) *Determination of maximum HAP vapor pressure for off-site material in a tank.* (1) The maximum HAP vapor pressure of the off-site material composition managed in a tank shall be determined using either direct measurement as specified in paragraph (j)(2) of this section or by knowledge of the off-site material as specified by paragraph (j)(3) of this section.

(2) Direct measurement to determine the maximum HAP vapor pressure of an off-site material.

(i) Sampling. A sufficient number of samples shall be collected to be representative of the off-site material contained in the tank. 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 is 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.

(ii) Analysis. Any one of the following methods may be used to analyze the samples and compute the maximum HAP vapor pressure of the off-site material:

(A) Method 25E in 40 CFR part 60 appendix A;

(B) Methods described in American Petroleum Institute Bulletin 2517, “Evaporation Loss from External Floating Roof Tanks,”;

(C) Methods obtained from standard reference texts;

(D) ASTM Method 2879-83; or

(E) Any other method approved by the Administrator.

(3) *Use of knowledge to determine the maximum HAP vapor pressure of the off-site material.* Documentation shall be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3, Table 4, or Table 5 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category. In the event that the Administrator and the owner or operator disagree on a determination of the maximum HAP vapor pressure for an off-site material stream using knowledge, then the results from a determination of HAP vapor pressure using direct measurement as specified in paragraph (j)(2) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Administrator may perform or require that the owner or operator perform this determination using direct measurement.

(k) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 8.1.1 of Method 21 shall be for the weighted average composition of the organic constituents in the material placed in the unit at the time of monitoring, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as follows:

(i) Zero air (less than 10 ppmv hydrocarbon in air); and

(ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.

(6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (k)(8)(i) or (k)(8)(ii) of this section.

(i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (k)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (k)(9)(i) and (k)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 10,000 ppmv.

(l) *Control device performance test procedures.* Performance tests shall be based on representative performance (*i.e.,* performance based on normal operating conditions) and shall exclude periods of startup and shutdown unless specified by the Administrator. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites at the inlet and outlet of the control device.

(i) To determine compliance with a control device percent reduction requirement, sampling sites shall be located at the inlet of the control device as specified in paragraphs (l)(1)(i)(A) and (l)(1)(i)(B) of this section, and at the outlet of the control device.

(A) The control device inlet sampling site shall be located after the final product recovery device.

(B) If a vent stream is introduced with the combustion air or as an auxiliary fuel into a boiler or process heater, the location of the inlet sampling sites shall be selected to ensure that the measurement of total HAP concentration or TOC concentration, as applicable, includes all vent streams and primary and secondary fuels introduced into the boiler or process heater.

(ii) To determine compliance with an enclosed combustion device concentration limit, the sampling site shall be located at the outlet of the device.

(2) The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate.

(3) To determine compliance with the control device percent reduction requirement, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure the HAP in Table 1 of this subpart or Method 25A of 40 CFR part 60, appendix A to measure TOC. Method 18 may be used to measure methane and ethane, and the measured concentration may be subtracted from the Method 25A measurement. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 in appendix A of this part may be used. The following procedures shall be used to calculate percent reduction efficiency:

(i) A minimum of three sample runs must be performed. The minimum sampling time for each run shall be 1 hour. For Method 18, either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15 minute intervals during the run.

(ii) The mass rate of either TOC (minus methane and ethane) or total HAP (E_i and E_o ,respectively) shall be computed.

(A) The following equations shall be used:

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

$$E_o = K_2 \times Q_o \times \sum_{j=1}^{n} \left(C_{oj} \times M_{oj} \right)$$

Where:

C_{ij}, C_{oj} = Concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, parts per million by volume.

E_i, E_o = Mass rate of TOC (minus methane and ethane) or total HAP at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour.

M_{ij}, M_{oj} = Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.

Q_i, Q_o = Flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.

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

(B) When the TOC mass rate is calculated, the average concentration reading (minus methane and ethane) measured by Method 25A of 40 CFR part 60, appendix A shall be used in the equation in paragraph (l)(3)(ii)(A) of this section.

(C) When the total HAP mass rate is calculated, only the HAP constituents shall be summed using the equation in paragraph (l)(3)(ii)(A) of this section.

(iii) The percent reduction in TOC (minus methane and ethane) or total HAP shall be calculated as follows:

$$R_{cd} = \frac{E_i - E_o}{E_i} \times 100$$

where:

R_{cd} = Control efficiency of control device, percent.

E_i = Mass rate of TOC (minus methane and ethane) or total HAP at the inlet to the control device as calculated under paragraph (l)(3)(ii) of this section, kilograms TOC per hour or kilograms HAP per hour.

E_o = Mass rate of TOC (minus methane and ethane) or total HAP at the outlet of the control device, as calculated under paragraph (l)(3)(ii) of this section, kilograms TOC per hour or kilograms HAP per hour.

(iv) If the vent stream entering a boiler or process heater is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total HAP in all combusted vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total HAP exiting the device, respectively.

(4) To determine compliance with the enclosed combustion device total HAP concentration limit of this subpart, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure the total HAP in Table 1 of this subpart or Method 25A of 40 CFR part 60, appendix A to measure TOC. Method 18 may be used to measure methane and ethane and the measured concentration may be subtracted from the Method 25A measurement. Alternatively, any other method or data that has been validated according to Method 301 in appendix A of this part, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

(i) A minimum of three sample runs must be performed. The minimum sampling time for each run shall be 1 hour. For Method 18, either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(ii) The TOC concentration or total HAP concentration shall be calculated according to paragraph (m)(4)(ii)(A) or (m)(4)(ii)(B) of this section.

(A) The TOC concentration (C_{TOC}) is the average concentration readings provided by Method 25 A of 40 CFR part 60, appendix A, minus the concentration of methane and ethane.

(B) The total HAP concentration (C_{HAP}) shall be computed according to the following equation:

$$C_{HAP} = \sum_{i=1}^{x} \frac{\sum_{j=1}^{n} C_{ji}}{x}$$

where:

C_{HAP} = Total concentration of HAP compounds listed in Table 1 of this subpart, dry basis, parts per million by volume.

C_{ij} = Concentration of sample components j of sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

(iii) The measured TOC concentration or total HAP concentration shall be corrected to 3 percent oxygen as follows:

(A) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration ($\%O_{2dry}$). Alternatively, the owner or operator may use Method 3A of 40 CFR part 60, appendix A to determine the oxygen concentration. The samples shall be collected during the same time that the samples are collected for determining TOC concentration or total HAP concentration.

(B) The concentration corrected to 3 percent oxygen (C_c) shall be computed using the following equation:

$$C_c = C_m \left(\frac{17.9}{20.9 - \%O_{2dry}} \right)$$

where:

C_c = TOC concentration or total HAP concentration corrected to 3 percent oxygen, dry basis, parts per million by volume.

C_m = Measured TOC concentration or total HAP concentration, dry basis, parts per million by volume.

$\%O_{2dry}$ = Concentration of oxygen, dry basis, percent by volume.

(m) Determination of process vent stream flow rate and total HAP concentration.

(1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, must be used for selection of the sampling site.

(2) No traverse site selection method is needed for vents smaller than 0.10 meter in diameter. For vents smaller than 0.10 meter in diameter, sample at the center of the vent.

(3) Process vent stream gas volumetric flow rate must be determined using Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate.

(4) Process vent stream total HAP concentration must be measured using the following procedures:

(i) Method 18 of 40 CFR part 60, appendix A, must be used to measure the total HAP concentration. Alternatively, any other method or data that has been validated according to the protocol in Method 301 of appendix A of this part may be used.

(ii) Where Method 18 of 40 CFR part 60, appendix A, is used, the following procedures must be used to calculate parts per million by volume concentration:

(A) The minimum sampling time for each run must be 1 hour in which either an integrated sample or four grab samples must be taken. If grab sampling is used, then the samples must be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(B) The total HAP concentration (C_{HAP}) must be computed according to the following equation:

$$C_{HAP} = \frac{\sum_{i=1}^{x}\left(\sum_{j=1}^{n} C_{ji}\right)}{X}$$

Where:

C_{HAP} = Total concentration of HAP compounds listed in Table 1 of this subpart, dry basis, parts per million by volume.

C_{ji} = Concentration of sample component j of the sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

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§63.695 Inspection and monitoring requirements.

(a) The owner or operator must install, calibrate, maintain, and operate all monitoring system components according to §§63.8, 63.684(e), 63.693(d)(3), (e)(3), (f)(3), (g)(3), and (h)(3), and paragraph (a)(5) of this section and perform the inspection and monitoring procedures specified in paragraphs (a)(1) through (4) of this section.

(1) To inspect tank fixed roofs and floating roofs for compliance with the Tank Level 2 controls standards specified in §63.685 of this subpart, the inspection procedures are specified in paragraph (b) of this section.

(2) To inspect and monitor closed-vent systems for compliance with the standards specified in §63.693 of this subpart, the inspection and monitoring procedures are specified in paragraph (c) of this section.

(3) To inspect and monitor transfer system covers for compliance with the standards specified in §63.689(c)(1) of this subpart, the inspection and monitoring procedures are specified in paragraph (d) of this section.

(4) To monitor and record off-site material treatment processes for compliance with the standards specified in 63.684(e), the monitoring procedures are specified in paragraph (e) of this section.

(5)(i) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator must operate the continuous monitoring system at all times the affected source is operating. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator is required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

(ii) The owner or operator may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. The owner or operator must use all the data collected during all other required data collection periods in assessing the operation of the control device and associated control system. The owner or operator must report any periods for which the monitoring system failed to collect required data.

(b) Tank Level 2 fixed roof and floating roof inspection requirements.

(1) Owners and operators that use a tank equipped with an internal floating roof in accordance with the provisions of §63.685(e) of this subpart shall meet the following inspection requirements:

(i) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, the internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the waste surfaces from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) The owner or operator shall inspect the internal floating roof components as follows except as provided for in paragraph (b)(1)(iii) of this section:

(A) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every calendar year after initial fill, and

(B) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in §63.697 of this subpart.

(iii) As an alternative to performing the inspections specified in paragraph (b)(1)(ii) of this section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually

inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 5 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in §63.697 of this subpart.

(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696 of this subpart.

(2) Owners and operators that use a tank equipped with an external floating roof in accordance with the provisions of §63.685(f) of this subpart shall meet the following requirements:

(i) The owner or operator shall measure the external floating roof seal gaps in accordance with the following requirements:

(A) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in §63.697 of this subpart.

(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 days after initial operation of the separator following installation of the floating roof and, thereafter, at least once every year. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in §63.697 of this subpart.

(C) If a tank ceases to hold off-site material for a period of 1 year or more, subsequent introduction of off-site material into the tank shall be considered an initial operation for the purposes of paragraphs (b)(2)(i)(A) and (b)(2)(i)(B) of this section.

(D) The owner shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure.

(*1*) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.

(*2*) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) ($\frac{1}{8}$ -inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

(*3*) For a seal gap measured under paragraph (b)(2) of this section, the gap surface area shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(*4*) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in §63.685(f)(1) of this subpart.

(E) In the event that the seal gap measurements do not conform to the specifications in §63.685(f)(1) of this subpart, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696 of this subpart.

(ii) The owner or operator shall visually inspect the external floating roof in accordance with the following requirements:

(A) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to: holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(B) The owner or operator shall perform the inspections following installation of the external floating roof and, thereafter, at least once every year.

(C) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696(d) of this subpart.

(3) Owners and operators that use a tank equipped with a fixed roof in accordance with the provisions of §63.685(g) of this subpart shall meet the following requirements:

(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a tank is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.

(ii) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696(e) of this subpart.

(4) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (b)(1), (b)(2), or (b)(3) of this section in the following manner:

(i) The owner or operator shall within 45 calendar days of detecting the defect either repair the defect or empty the tank and remove it from service. If within this 45-day period the defect cannot be repaired or the tank cannot be removed from service without disrupting operations at the plant site, the owner or operator is allowed two 30-day extensions. In cases when an owner or operator elects to use a 30-day extension, the owner or operator shall prepare and maintain documentation describing the defect, explaining why alternative storage capacity is not available, and specify a schedule of actions that will ensure that the control equipment will be repaired or the tank emptied as soon as possible.

(ii) When a defect is detected during an inspection of a tank that has been emptied and degassed, the owner or operator shall repair the defect before refilling the tank.

(c) Owners and operators that use a closed-vent system in accordance with the provisions of §63.693 of this subpart shall meet the following inspection and monitoring requirements:

(1) Each closed-vent system that is used to comply with §63.693(c)(1)(i) of this subpart shall be inspected and monitored in accordance with the following requirements:

(i) At initial startup, the owner or operator shall monitor the closed-vent system components and connections using the procedures specified in §63.694(k) of this subpart to demonstrate that the closed-vent system operates with no detectable organic emissions.

(ii) After initial startup, the owner or operator shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The owner or operator shall monitor a component or connection using the procedures specified in §63.694(k) of this subpart to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

(B) Closed-vent system components or connections other than those specified in paragraph (c)(1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in §63.694(k) of this subpart to demonstrate that components or connections operate with no detectable organic emissions.

(C) The continuous monitoring system required by §63.693(b)(4)(i) shall monitor and record either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15 minutes or less.

(D) The owner or operator shall visually inspect the seal or closure mechanism required by §63.693(c)(2)(ii) at least once every month to verify that the bypass mechanism is maintained in the closed position.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of paragraph (c)(3) of this section.

(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in §63.696 of this subpart.

(2) Each closed-vent system that is used to comply with §63.693(c)(1)(ii) of this subpart shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping; loose connections; or broken or missing caps or other closure devices.

(ii) The owner or operator must perform an initial inspection following installation of the closed-vent system. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(3) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696 of this subpart.

(3) The owner or operator shall repair all detected defects as follows:

(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.

(ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (c)(3)(ii)(A) or (c)(3)(ii)(B) occurs. In this case, the owner or operator must repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of the defect must be completed before the process or unit resumes operation.

(A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.

(B) The owner or operator determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.

(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in §63.696 of this subpart.

(d) Owners and operators that use a transfer system equipped with a cover in accordance with the provisions of §63.689(c)(1) of this subpart shall meet the following inspection requirements:

(1) The cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover sections or between the cover and its mounting; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a transfer system is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., access hatches, etc.) and can be opened to the atmosphere.

(2) The owner or operator must perform an initial inspection following installation of the cover. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(3) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(5) of this section.

(4) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696 of this subpart.

(5) The owner or operator shall repair all detected defects as follows:

(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (d)(5)(ii) of this section.

(ii) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at the site to accept the material normally handled by the system. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be completed before the process or unit resumes operation.

(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in §63.696 of this subpart.

(e) *Control device monitoring requirements.* For each control device required under §63.693 to be monitored in accordance with the provisions of this paragraph (e), the owner or operator must ensure that each control device operates properly by monitoring the control device in accordance with the requirements specified in paragraphs (e)(1) through (5) of this section.

(1) A continuous parameter monitoring system must be used to measure the operating parameter or parameters specified for the control device in §63.693(d) through §63.693(g) of this subpart as applicable to the type and design of the control device. The continuous parameter monitoring system must meet the following specifications and requirements:

(i) The continuous parameter monitoring system must measure either an instantaneous value at least once every 15 minutes or an average value for intervals of 15 minutes or less and continuously record either:

(A) Each measured data value; or

(B) Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

(ii) The monitoring system must be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly.

(2) Using the data recorded by the monitoring system, the owner or operator must calculate the daily average value for each monitored operating parameter for each operating day. If operation of the control device is continuous, the operating day is a 24-hour period. If control device operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.

(3) For each monitored operating parameter, the owner or operator must establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified in §63.693(b)(2) of this subpart. Each minimum or maximum operating parameter value must be established in accordance with the requirements in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

(i) If the owner or operator conducts a performance test to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on values measured during the performance test and supplemented, as necessary, by the control device design specifications, manufacturer recommendations, or other applicable information.

(ii) If the owner or operator uses a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.

(4) A deviation for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (e)(4)(i) through (iii) of this section being met. When multiple operating parameters are monitored for the same control device and during the same operating day more than one of these operating parameters meets a deviation criterion specified in paragraphs (e)(4)(i) through (iii) of this section, then a single deviation is determined to have occurred for the control device for that operating day.

(i) A deviation occurs when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter in accordance with the requirements of paragraph (e)(3) of this section.

(ii) A deviation occurs when the period of control device operation is 4 hours or greater in an operating day and the monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.

(iii) A deviation occurs when the period of control device operation is less than 4 hours in an operating day and more than 1 of the hours during the period does not constitute a valid hour of data due to insufficient monitoring data. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.

(5) For each deviation, except when the deviation occurs during periods of non-operation of the unit or the process that is vented to the control device (resulting in cessation of HAP emissions to which the monitoring applies), the owner or operator shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard.

(f) *Alternative inspection and monitoring interval.* Following the initial inspection and monitoring of a piece of air pollution control equipment in accordance with the applicable provisions of this section, subsequent inspection and

monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (f)(1) and (f)(2) of this section.

(1) The owner or operator must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as “unsafe to inspect and monitor.” The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.

(2) The owner or operator must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

[64 FR 38977, July 20, 1999, as amended at 68 FR 37352, June 23, 2003; 71 FR 20457, Apr. 20, 2006; 80 FR 14278, Mar. 18, 2015]

§63.696 Recordkeeping requirements.

(a) The owner or operator subject to this subpart shall comply with the recordkeeping requirements in §63.10 under 40 CFR 63 subpart A—General Provisions that are applicable to this subpart as specified in Table 2 of this subpart.

(b) The owner or operator of a control device subject to this subpart shall maintain the records in accordance with the requirements of 40 CFR 63.10 of this part.

(c) [Reserved]

(d) Each owner or operator using an internal floating roof to comply with the tank control requirements specified in §63.685(e) of this subpart or using an external floating roof to comply with the tank control requirements specified in §63.685(f) of this subpart shall prepare and maintain the following records:

(1) Documentation describing the floating roof design and the dimensions of the tank.

(2) A record for each inspection required by §63.695(b) of this subpart, as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of inspection.

(3) The owner or operator shall record for each defect detected during inspections required by §63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §63.695(b)(4) of this section, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(4) Owners and operators that use a tank equipped with an external floating roof in accordance with the provisions of §63.685(f) of this subpart shall prepare and maintain records for each seal gap inspection required by §63.695(b) describing the results of the seal gap measurements. The records shall include the date of that the measurements are performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in §63.695(b) of this subpart, the records shall include a description of the repairs that were made, the date the repairs were made, and the date the separator was emptied, if necessary.

(e) Each owner or operator using a fixed roof to comply with the tank control requirements specified in §63.685(g) of this subpart shall prepare and maintain the following records:

(1) A record for each inspection required by §63.695(b) of this subpart, as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of inspection.

(2) The owner or operator shall record for each defect detected during inspections required by §63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §63.695(b)(4) of this section, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(f) Each owner or operator using an enclosure to comply with the tank control requirements specified in §63.685(i) of this subpart shall prepare and maintain records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(g) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (g)(1) and (g)(2) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.693(d) through (h) of this subpart, as applicable.

(1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of §63.693 (d) through (h) of this subpart, as applicable, due to planned routine maintenance.

(h) An owner or operator shall record the malfunction information specified in paragraphs (h)(1) through (3) of this section.

(1) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure, record the date, time and duration of the failure.

(2) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(3) Record actions taken to minimize emissions in accordance with §63.683(e) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(i) For pressure relief devices in off-site material service, keep records of the information specified in paragraphs (i)(1) through (5) of this section, as applicable.

(1) A list of identification numbers for pressure relief devices that the owner or operator elects to route emissions through a closed-vent system to a control device, process or drain system under the provisions in §63.691(c)(4).

(2) A list of identification numbers for pressure relief devices that do not consist of or include a rupture disk, subject to the provisions in §63.691(c)(2)(i).

(3) A list of identification numbers for pressure relief devices equipped with rupture disks, subject to the provisions in §63.691(c)(2)(ii).

(4) The dates and results of the Method 21 of 40 CFR part 60, appendix A, monitoring following a pressure release for each pressure relief device subject to the provisions in §63.691(c)(2)(i). The results of each monitoring event shall include:

(i) The measured background level.

(ii) The maximum instrument reading measured at each pressure relief device.

(5) For pressure relief devices in off-site material service subject to §63.691(c)(3), keep records of each pressure release to the atmosphere, including the following information:

(i) The source, nature, and cause of the pressure release.

(ii) The date, time, and duration of the pressure release.

(iii) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the pressure release and the calculations used for determining this quantity.

(iv) The actions taken to prevent this pressure release.

(v) The measures adopted to prevent future such pressure releases.

(j) (1) For pressure tank closure devices, as specified in §63.685(h)(2), keep records of each release to the atmosphere, including the information specified in paragraphs (j)(3) though (7) of this section.

(2) For each closed vent system that includes bypass devices that could divert a stream away from the control device and into the atmosphere, as specified in §63.693(c)(2), and each open-ended valve or line in an emergency shutdown system which is designed to open automatically in the event of a process upset, as specified in §63.167(d) or 40 CFR 61.242-6(d), keep records of each release to the atmosphere, including the information specified in paragraphs (j)(3) though (9) of this section.

(3) The source, nature, and cause of the release.

(4) The date, time, and duration of the release.

(5) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the release and the calculations used for determining this quantity.

(6) The actions taken to prevent this release.

(7) The measures adopted to prevent future such release.

(8) Hourly records of whether the bypass flow indicator specified under §63.693(c)(2) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.

(9) Where a seal mechanism is used to comply with §63.693(c)(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 mechanism has been done, and shall record the duration 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.

[61 FR 34158, July 1, 1996, as amended at 80 FR 14279, Mar. 18, 2015]

§63.697 Reporting requirements.

(a) Each owner or operator of an affected source subject to this subpart must comply with the notification requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraphs (a)(2) and (3) of this section.

(1) The owner or operator of an affected source must submit notices to the Administrator in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of this subpart. For the purpose of this subpart, an owner or operator subject to the initial notification requirements under 40 CFR 63.9(b)(2) must submit the required notification on or before October 19, 1999.

(i) For pressure relief devices in off-site material service subject to the requirements of §63.691(c), the owner or operator must submit the information listed in paragraph (a)(1)(ii) of this section in the notification of compliance status required under §63.9(h) within 150 days after the first applicable compliance date for pressure relief device monitoring.

(ii) For pressure relief devices in off-site material service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process parameters to be monitored (if applicable), a description of the alarms or other methods by which operators will be notified of a pressure release, and a description of how the owner or operator will determine the information to be recorded under §63.696(i)(5)(ii) through (iii) (*i.e.,* the duration of the pressure release and the methodology and calculations for determining the quantity of HAP listed in Table 1 of this subpart emitted during the pressure release).

(2) The owner or operator of an affected source must submit reports to the Administrator in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of this subpart.

(3) *Electronic reporting.* Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, the owner or operator must submit the results of the performance test according to the manner specified by either paragraph (a)(3)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (*http://www.epa.gov/ttn/chief/ert/index.html*), the owner or operator must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) accessed through the EPA's Central Data Exchange (CDX) (*http://cdx.epa.gov/epa_home.asp*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT. Owners or operators who claim that some of the performance test information being submitted is confidential business information (CBI) must submit a complete file generated through the use of the EPA's ERT, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Road, Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (a)(3)(i).

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, the owner or operator must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 60.4.

(b) The owner or operator of a control device used to meet the requirements of §63.693 of this subpart shall submit the following notifications and reports to the Administrator:

(1) A Notification of Performance Tests specified in §63.7 and §63.9(g) of this part,

(2) Performance test reports specified in §63.10(d)(2) of this part, and

(3) *Reports of malfunctions.* If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time and duration of each failure. For each failure the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(4) A summary report specified in §63.10(e)(3) shall be submitted on a semiannual basis (*i.e.,* once every 6-month period). The summary report must include a description of all deviations as defined in §§63.683(f) and 63.695(e) that have occurred during the 6-month reporting period. For each deviation caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the deviation occurred. For each

deviation caused by lack of monitoring data, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.

(5) For pressure relief devices in off-site material service subject to §63.691(c), Periodic Reports must include the information specified in paragraphs (b)(5)(i) through (iii) of this section.

(i) For pressure relief devices in off-site material service subject to §63.691(c), report the results of all monitoring conducted within the reporting period.

(ii) For pressure relief devices in gas/vapor service subject to §63.691(c)(2)(i), report any instrument reading of 500 ppm above background or greater, if detected more than 5 days after the pressure release.

(iii) For pressure relief devices in off-site material service subject to §63.691(c)(3), report each pressure release to the atmosphere, including the following information:

(A) The source, nature, and cause of the pressure release.

(B) The date, time, and duration of the pressure release.

(C) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the pressure release and the method used for determining this quantity.

(D) The actions taken to prevent this pressure release.

(E) The measures adopted to prevent future such pressure releases.

(6) *Pressure tank closure device or bypass deviation report.* The owner or operator must submit to the Administrator the information specified in paragraph (b)(6)(iv) of this section when any of the conditions in paragraphs (b)(6)(i) through (iii) of this section are met.

(i) Any pressure tank closure device, as specified in §63.685(h)(2), has released to the atmosphere.

(ii) Any closed vent system that includes bypass devices that could divert a vent a stream away from the control device and into the atmosphere, as specified in §63.693(c)(2), has released directly to the atmosphere.

(iii) Any open-ended valve or line in an emergency shutdown system which is designed to open automatically in the event of a process upset, as specified in §63.167(d) or 40 CFR 61.242-6(d), has released directly to the atmosphere.

(iv) The pressure tank closure device or bypass deviation report must include the information specified in paragraphs (b)(6)(iv)(A) through (E) of this section.

(A) The source, nature and cause of the release.

(B) The date, time and duration of the discharge.

(C) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the release and the method used for determining this quantity.

(D) The actions taken to prevent this release.

(E) The measures adopted to prevent future such releases.

(c) Each owner or operator using an internal floating roof or external floating roof to comply with the Tank Level 2 control requirements specified in §63.685(d) of this subpart shall notify the Administrator in advance of each inspection required under §63.695(b) of this subpart to provide the Administrator with the opportunity to have an

observer present during the inspection. The owner or operator shall notify the Administrator of the date and location of the inspection as follows:

(1) Prior to each inspection to measure external floating roof seal gaps as required under §63.695(b) of this subpart, written notification shall be prepared and sent by the owner or operator so that it is received by the Administrator at least 30 calendar days before the date the measurements are scheduled to be performed.

(2) Prior to each visual inspection of an internal floating roof or external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (c)(3) of this section.

(3) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Administrator at least 7 calendar days before refilling the tank.

[61 FR 34158, July 1, 1996, as amended at 64 FR 38981, July 20, 1999; 80 FR 14279, Mar. 18, 2015]

§63.698 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of alternatives to the requirements in §§63.680, 63.683 through 63.691, and 63.693. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

(5) Approval of alternatives to the electronic reporting requirements in §63.697(a)(3).

[68 FR 37352, June 23, 2003, as amended at 80 FR 14280, Mar. 18, 2015]

Table 1 to Subpart DD of Part 63—List of Hazardous Air Pollutants (HAP) for Subpart DD

CAS No.[a]	Chemical name	f_m 305
75-07-0	Acetaldehyde	1.000

CAS No.[a]	Chemical name	f_m 305
75-05-8	Acetonitrile	0.989
98-86-2	Acetophenone	0.314
107-02-8	Acrolein	1.000
107-13-1	Acrylonitrile	0.999
107-05-1	Allyl chloride	1.000
71-43-2	Benzene (includes benzene in gasoline)	1.000
98-07-7	Benzotrichloride (isomers and mixture)	0.958
100-44-7	Benzyl chloride	1.000
92-52-4	Biphenyl	0.864
542-88-1	Bis(chloromethyl)ether[b]	0.999
75-25-2	Bromoform	0.998
106-99-0	1,3-Butadiene	1.000
75-15-0	Carbon disulfide	1.000
56-23-5	Carbon tetrachloride	1.000
43-58-1	Carbonyl sulfide	1.000
133-90-4	Chloramben	0.633
108-90-7	Chlorobenzene	1.000
67-66-3	Chloroform	1.000
107-30-2	Chloromethyl methyl ether[b]	1.000
126-99-8	Chloroprene	1.000
98-82-8	Cumene	1.000
94-75-7	2,4-D, salts and esters	0.167
334-88-3	Diazomethane[c]	0.999
132-64-9	Dibenzofurans	0.967
96-12-8	1,2-Dibromo-3-chloropropane	1.000
106-46-7	1,4-Dichlorobenzene(p)	1.000
107-06-2	Dichloroethane (Ethylene dichloride)	1.000
111-44-4	Dichloroethyl ether (Bis(2-chloroethyl ether)	0.757
542-75-6	1,3-Dichloropropene	1.000
79-44-7	Dimethyl carbamoyl chloride[c]	0.150
64-67-5	Diethyl sulfate	0.0025
77-78-1	Dimethyl sulfate	0.086
121-69-7	N,N-Dimethylaniline	0.0008
51-28-5	2,4-Dinitrophenol	0.0077
121-14-2	2,4-Dinitrotoluene	0.0848

CAS No.[a]	Chemical name	f_m 305
123-91-1	1,4-Dioxane (1,4-Diethyleneoxide)	0.869
106-89-8	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	0.939
106-88-7	1,2-Epoxybutane	1.000
140-88-5	Ethyl acrylate	1.000
100-41-4	Ethyl benzene	1.000
75-00-3	Ethyl chloride (Chloroethane)	1.000
106-93-4	Ethylene dibromide (Dibromoethane)	0.999
107-06-2	Ethylene dichloride (1,2-Dichloroethane)	1.000
151-56-4	Ethylene imine (Aziridine)	0.867
75-21-8	Ethylene oxide	1.000
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)	1.000
	Glycol ethers[d] that have a Henry's Law constant value equal to or greater than 0.1 Y/X (1.8×10^{-6} atm/gm-mole/m^3) at 25°C	[(e)]
118-74-1	Hexachlorobenzene	0.97
87-68-3	Hexachlorobutadiene	0.88
67-72-1	Hexachloroethane	0.499
110-54-3	Hexane	1.000
78-59-1	Isophorone	0.506
58-89-9	Lindane (all isomers)	1.000
67-56-1	Methanol	0.855
74-83-9	Methyl bromide (Bromomethane)	1.000
74-87-3	Methyl chloride (Choromethane)	1.000
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	1.000
78-93-3	Methyl ethyl ketone (2-Butanone)	0.990
74-88-4	Methyl iodide (Iodomethane)	1.0001
108-10-1	Methyl isobutyl ketone (Hexone)	0.9796
624-83-9	Methyl isocyanate	1.000
80-62-6	Methyl methacrylate	0.916
1634-04-4	Methyl tert butyl ether	1.000
75-09-2	Methylene chloride (Dichloromethane)	1.000
91-20-3	Naphthalene	0.994
98-95-3	Nitrobenzene	0.394
79-46-9	2-Nitropropane	0.989
82-68-8	Pentachloronitrobenzene (Quintobenzene)	0.839
87-86-5	Pentachlorophenol	0.0898
75-44-5	Phosgene[c]	1.000

CAS No.[a]	Chemical name	f_m 305
123-38-6	Propionaldehyde	0.999
78-87-5	Propylene dichloride (1,2-Dichloropropane)	1.000
75-56-9	Propylene oxide	1.000
75-55-8	1,2-Propylenimine (2-Methyl aziridine)	0.945
100-42-5	Styrene	1.000
96-09-3	Styrene oxide	0.830
79-34-5	1,1,2,2-Tetrachloroethane	0.999
127-18-4	Tetrachloroethylene (Perchloroethylene)	1.000
108-88-3	Toluene	1.000
95-53-4	o-Toluidine	0.152
120-82-1	1,2,4-Trichlorobenzene	1.000
71-55-6	1,1,1-Trichloroethane (Methyl chlorform)	1.000
79-00-5	1,1,2-Trichloroethane (Vinyl trichloride)	1.000
79-01-6	Trichloroethylene	1.000
95-95-4	2,4,5-Trichlorophenol	0.108
88-06-2	2,4,6-Trichlorophenol	0.132
121-44-8	Triethylamine	1.000
540-84-1	2,2,4-Trimethylpentane	1.000
108-05-4	Vinyl acetate	1.000
593-60-2	Vinyl bromide	1.000
75-01-4	Vinyl chloride	1.000
75-35-4	Vinylidene chloride (1,1-Dichloroethylene)	1.000
1330-20-7	Xylenes (isomers and mixture)	1.000
95-47-6	o-Xylenes	1.000
108-38-3	m-Xylenes	1.000
106-42-3	p-Xylenes	1.000

Notes:

$f_{m\,305}$ = Method 305 fraction measure factor.

a. CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

b. Denotes a HAP that hydrolyzes quickly in water, but the hydrolysis products are also HAP chemicals.

c. Denotes a HAP that may react violently with water, exercise caustic is an expected analyte.

d. Denotes a HAP that hydrolyzes slowly in water.

e. The $f_{m\,305}$ factors for some of the more common glycol ethers can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

[64 FR 38981, July 20, 1999]

Table 2 to Subpart DD of Part 63—Applicability of Paragraphs in Subpart A of This Part 63—General Provisions to Subpart DD

Subpart A reference	Applies to Subpart DD	Explanation
63.1(a)(1)	Yes	
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	No	Subpart DD (this table) specifies applicability of each paragraph in subpart A to subpart DD.
63.1(a)(5)-63.1(a)(9)	No	
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	
63.1(a)(12)	Yes	
63.1(b)(1)	No	Subpart DD specifies its own applicability.
63.1(b)(2)	No	Reserved.
63.1(b)(3)	No	
63.1(c)(1)	No	Subpart DD explicitly specifies requirements that apply.
63.1(c)(2)	No	Area sources are not subject to subpart DD.
63.1(c)(3)	No	Reserved.
63.1(c)(4)	No	Reserved.
63.1(c)(5)	Yes	Except that sources are not required to submit notifications overridden by this table.
63.1(d)	No	
63.1(e)	No	
63.2	Yes	§63.681 of subpart DD specifies that if the same term is defined in subparts A and DD, it shall have the meaning given in subpart DD.
63.3	Yes	
63.4(a)(1)-63.4(a)(2)	Yes	
63.4(a)(3)	No	Reserved.
63.4(a)(4)	No	Reserved.
63.4(a)(5)	No	Reserved.
63.4(b)	Yes	
63.4(c)	Yes	
63.5(a)(1)	Yes	
63.5(a)(2)	Yes	

Subpart A reference	Applies to Subpart DD	Explanation
63.5(b)(1)	Yes	
63.5(b)(2)	No	Reserved.
63.5(b)(3)	Yes	
63.5(b)(4)	Yes	Except the cross-reference to §63.9(b) is changed to §63.9(b)(4) and (5). Subpart DD overrides §63.9(b)(2) and (b)(3).
63.5(b)(5)	No	Reserved.
63.5(b)(6)	Yes	
63.5(c)	No	Reserved.
63.5(d)(1)(i)	Yes	
63.5(d)(1)(ii)	Yes	
63.5(d)(1)(iii)	Yes	
63.5(d)(2)	No	
63.5(d)(3)	Yes	
63.5(d)(4)	Yes	
63.5(e)	Yes	
63.5(f)(1)	Yes	
63.5(f)(2)	Yes	
63.6(a)	Yes	
63.6(b)(1)	No	Subpart DD specifies compliance dates for sources subject to subpart DD.
63.6(b)(2)	No	
63.6(b)(3)	No	
63.6(b)(4)	No	
63.6(b)(5)	No	§63.697 of subpart DD includes notification requirements.
63.6(b)(6)	No	
63.6(b)(7)	No	
63.6(c)(1)	No	§63.680 of subpart DD specifies the compliance date.
63.6(c)(2)-63.6(c)(4)	No	
63.6(c)(5)	Yes	
63.6(d)	No	
63.6(e)(1)(i)	No	See §63.683(e) for general duty requirement.
63.6(e)(1)(ii)	No	
63.6(e)(1)(iii)	Yes	
63.6(e)(2)	No	Reserved.
63.6(e)(3)	No	

Subpart A reference	Applies to Subpart DD	Explanation
63.6(f)(1)	No	
63.6(f)(2)(i)	Yes	
63.6(f)(2)(ii)	Yes	Subpart DD specifies the use of monitoring data in determining compliance with subpart DD.
63.6(f)(2)(iii) (A), (B), and (C)	Yes	
63.6(f)(2)(iii) (D)	No	
63.6(f)(2)(iv)	Yes	
63.6(f)(2)(v)	Yes	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Subpart DD does not require opacity and visible emission standards.
63.6(i)	Yes	Except for §63.6(i)(15), which is reserved.
63.6(j)	Yes	
63.7(a)(1)	No	Subpart DD specifies required testing and compliance demonstration procedures.
63.7(a)(2)	Yes	
63.7(a)(3)	Yes	
63.7(a)(4)	Yes	
63.7(b)	Yes	
63.7(c)	Yes	
63.7(d)	Yes	
63.7(e)(1)	No	See §63.694(l).
63.7(e)(2)	Yes	
63.7(e)(3)	No	Subpart DD specifies test methods and procedures.
63.7(e)(4)	Yes	
63.7(f)	Yes	
63.7(g)	Yes	
63.7(h)(1)	Yes	
63.7(h)(2)	Yes	
63.7(h)(3)	Yes	
63.7(h)(4)	No	
63.7(h)(5)	Yes	
63.8(a)	No	
63.8(b)(1)	Yes	
63.8(b)(2)	No	Subpart DD specifies locations to conduct monitoring.

Subpart A reference	Applies to Subpart DD	Explanation
63.8(b)(3)	Yes	
63.8(c)(1)(i)	Yes	
63.8(c)(1)(ii)	Yes	
63.8(c)(1)(iii)	No	
63.8(c)(2)	Yes	
63.8(c)(3)	Yes	
63.8(c)(4)	No	Subpart DD specifies monitoring frequency
63.8(c)(5)-63.8(c)(8)	No	
63.8(d)	No	
63.8(e)	No	
63.8(f)(1)	Yes	
63.8(f)(2)	Yes	
63.8(f)(3)	Yes	
63.8(f)(4)(i)	Yes	
63.8(f)(4)(ii)	Yes	
63.8(f)(4)(iii)	No	
63.8(f)(5)(i)	Yes	
63.8(f)(5)(ii)	No	
63.8(f)(5)(iii)	Yes	
63.8(f)(6)	Yes	
63.8(g)	Yes	
63.9(a)	Yes	
63.9(b)(1)(i)	Yes	
63.9(b)(1)(ii)	No	
63.9(b)(2)	Yes	
63.9(b)(3)	No	
63.9(b)(4)	Yes	
63.9(b)(5)	Yes	
63.9(c)	Yes	
63.9(d)	Yes	
63.9(e)	Yes	
63.9(f)	No	
63.9(g)	Yes	
63.9(h)	Yes	
63.9(i)	Yes	

Subpart A reference	Applies to Subpart DD	Explanation
63.9(j)	No	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)(i)	No	
63.10(b)(2)(ii)	No	See §63.696(h) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
63.10(b)(2)(iii)	Yes	
63.10(b)(2)(iv)	No	
63.10(b)(2)(v)	No	
63.10(b)(2)(vi)-(ix)	Yes	
63.10(b)(2)(x)-(xi)	Yes	
63.10(b)(2) (xii)-(xiv)	No	
63.10(b)(3)	Yes	
63.10(c)(1)-(6)	No	
63.10(c)(7)-(8)	Yes	
63.10(c)(9)-(15)	No	
63.10(d)(1)	No	
63.10(d)(2)	Yes	
63.10(d)(3)	No	
63.10(d)(4)	Yes	
63.10(d)(5)(i)	Yes	
63.10(d)(5)	No	See §63.697(b)(3) for reporting of malfunctions.
63.10(e)(1)-63.10(e)(2)	No	
63.10(e)(3)	Yes	
63.10(e)(4)	No	
63.10(f)	Yes	
63.11-63.15	Yes	
63.16	No	

[a]Wherever subpart A specifies “postmark” dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

[64 FR 38983, July 20, 1999, as amended at 66 FR 1267, Jan. 8, 2001; 80 FR 14280, Mar. 18, 2015]

Table 3 to Subpart DD of Part 63—Tank Control Levels for Tanks at Existing Affected Sources as Required by 40 CFR 63.685(b**)(1)**

Tank design capacity (cubic meters)	Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)	Tank control level
Design capacity less than 75 m^3	Maximum HAP vapor pressure less than 76.6 kPa	Level 1.
Design capacity less than 75 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in §63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 75 m^3 and less than 151 m^3	Maximum HAP vapor pressure less than 27.6 kPa	Level 1.
	Maximum HAP vapor pressure equal to or greater than 27.6 kPa	Level 2.
Design capacity equal to or greater than 151 m^3	Maximum HAP vapor pressure less than 5.2 kPa	Level 1.
	Maximum HAP vapor pressure equal to or greater than 5.2 kPa	Level 2.

[80 FR 14282, Mar. 18, 2015]

Table 4 to Subpart DD of Part 63—Tank Control Levels for Tanks at Existing Affected Sources as Required by 40 CFR 63.685(b)(1)(ii)

Tank design capacity (cubic meters)	Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)	Tank control level
Design capacity less than 75 m^3	Maximum HAP vapor pressure less than 76.6 kPa	Level 1.
Design capacity less than 75 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in §63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 75 m^3 and less than 151 m^3	Maximum HAP vapor pressure less than 13.1 kPa	Level 1.
	Maximum HAP vapor pressure equal to or greater than 13.1 kPa	Level 2.
Design capacity equal to or greater than 151 m^3	Maximum HAP vapor pressure less than 5.2 kPa	Level 1.
	Maximum HAP vapor pressure equal to or greater than 5.2 kPa	Level 2.

[80 FR 14283, Mar. 18, 2015]

Table 5 to Subpart DD of Part 63—Tank Control Levels for Tanks at New Affected Sources as Required by 40 CFR 63.685(b)(2)

Tank design capacity (cubic meters)	**Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)**	**Tank control level**
Design capacity less than 38 m^3	Maximum HAP vapor pressure less than 76.6 kPa	Level 1.
Design capacity less than 38 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in §63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 38 m^3 and less than 151 m^3	Maximum HAP vapor pressure less than 13.1 kPa	Level 1.
	Maximum HAP vapor pressure equal to or greater than 13.1 kPa	Level 2.
Design capacity equal to or greater than 151 m^3	Maximum HAP vapor pressure less than 0.7 kPa	Level 1.
	Maximum HAP vapor pressure equal to or greater than 0.7 kPa	Level 2.

[80 FR 14283, Mar. 18, 2015]

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:	**Reclaimed Energy, Division of Superior Oil Company, Inc.**
Source Location:	**1500 Western Avenue, Connersville, Indiana 47331**
County:	**Fayette**
SIC Code:	**7389 (Business Services, Not Elsewhere Classified), 2869 (Industrial Organic Chemicals, Not Elsewhere Classified)**
Operation Permit No.:	**T 041-32531-00015**
Operation Permit Issuance Date:	**September 16, 2013**
Significant Permit Modification No.:	**041-36969-00015**
Permit Reviewer:	**Nicholas Eilerman**

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 041-32531-00015 on September 16, 2013. The source has since received the following approvals:

Permit Type	Permit Number	Issuance Date
Significant Permit Modification	041-35135-00015	May 14, 2015
Significant Source Modification	041-36223-00015	January 25, 2016
Significant Permit Modification	041-36231-00015	February 11, 2016

County Attainment Status

The source is located in Fayette County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. Fayette County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Fayette County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Fayette County has been classified as attainment or unclassifiable in Indiana for all the 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 type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Source Status - Existing Source

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:

	Source Wide Emissions Prior Issuance (ton/yr)						
Emission Units	**PM**	**PM10**	**PM2.5**[1]	**SO2**	**NOx**	**VOC**	**CO**
Product Shipment Loading	-	-	-	-	-	58.9[2]	-
Vacuum Distillation VD1	-	-	-	-	-		-
Recovery Processing Col 1, Col2 and TF1	-	-	-	-	-		-
Pot Still DP 1	-	-	-	-	-		-
Molecular sieve dryer MS1	-	-	-	-	-		-
Solid Dispersion Unit (EU-SD 1)	-	-	-	-	-		-
Drums emptying into tanks	-	-	-	-	-		-
All Storage Tanks (except TK43 and TK44)	-	-	-	-	-		-
TK43 and TK44 and Mixers	-	-	-	-	-		-
Pipes Fugitive Emissions	-	-	-	-	-		-
Thin film evaporator No.2 (TF 2)	-	-	-	-	-	24.99[3]	-
Combustion	0.273	1.094	1.094	0.086	14.4	0.791	0.273
WX1-WX2	-	-	-	-	-	0.01	-
GM-1	-	-	-	-	-	2.32	-
Paved Roads	1.04	0.21	0.05	-	-	-	-
RTO (proposed modification)	0.02	0.09	0.09	0.01	1.20	0.065	0.992
Total	**1.34**	**1.39**	**1.23**	**0.09**	**15.57**	**87.06**	**13.08**
PSD Major Source Thresholds	250	250	250	250	250	250	250

(1) PM2.5 listed is direct PM2.5.
(2) VOC PTE is based on existing 326 IAC 8-1-6 BACT limit in the permit.
(3) VOC PTE is based on 326 IAC 8-1-6 VOC BACT Avoidance limits taken by the source.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

(c) These emissions are based upon the TSD for Part 70 Significant Permit Modification Permit No. 041-36231-00015, issued on February 11, 2016.

Description of Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Reclaimed Energy, Division of Superior Oil Company, Inc. on March 18, 2016, relating to changes made to the NESHAP 40 CFR 63, Subpart DD - National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations. This subpart was recently revised to now reference NESHAP 40 CFR 63, Subpart H - National Emission Stands for Hazardous Air Pollutants for Equipment Leaks, instead of NESHAP 40 CFR 61 Subpart V for equipment leaks from applicable equipment, causing the source to be subject to NESHAP 40 CFR 63, Subpart H for all applicable equipment.

The existing equipment is no longer subject to 40 CFR 61, Subpart V because 40 CFR 61, Subpart V is a rule that needs to be referenced to be applicable and since it is no longer referenced in 40 CFR 63, Subpart DD, it is no longer applicable..

There are no new units and modified units involved in this modification.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(12), 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."

The emission units have not undergone a physical change as a result of this significant permit revision. There are no changes to the PTE of any of the previously mentioned emission units. This change is only to incorporate a new NESHAP into the permit.

(a) Approval to Construct

There is no increase in the potential to emit of any regulated pollutants associated with this modification. Therefore, this modification is not subject to the source modification requirements under 326 IAC 2-7-10.5.

(b) Approval to Operate

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

Permit Level Determination – PSD

The modification is not adding any new emission units. The modification to add in the new NESHAP applicability is not physically modifying the existing units. The source is currently minor under PSD.

This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant are less than the PSD major source thresholds. The total PTE of the source after issuance for each PSD regulated pollutant will still be less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

PTE of the Entire Source After Issuance of the Part 70 Amendment

The table below summarizes the potential to emit of the entire source after issuance of this amendment, reflecting all limits, of the emission units.

	Source Wide Emissions after Issuance (ton/yr)						
Emission Units	**PM**	**PM10**	**PM2.5[1]**	**SO2**	**NOx**	**VOC**	**CO**
Product Shipment Loading	-	-	-	-	-	58.9[2]	-
Vacuum Distillation VD1	-	-	-	-	-		-
Recovery Processing Col 1, Col2 and TF1	-	-	-	-	-		-
Pot Still DP 1	-	-	-	-	-		-
Molecular sieve dryer MS1	-	-	-	-	-		-
Solid Dispersion Unit (EU-SD 1)	-	-	-	-	-		-
Drums emptying into tanks	-	-	-	-	-		-
All Storage Tanks (except TK43 and TK44)	-	-	-	-	-		-
TK43 and TK44 and Mixers	-	-	-	-	-		-
Pipes Fugitive Emissions	-	-	-	-	-		-
Thin film evaporator No.2 (TF 2)	-	-	-	-	-	24.99[3]	-
Combustion	0.273	1.094	1.094	0.086	14.4	0.791	0.273
WX1-WX2	-	-	-	-	-	0.01	-
GM-1	-	-	-	-	-	2.32	-
Paved Roads	1.04	0.21	0.05	-	-	-	-
RTO (proposed modification)	0.02	0.09	0.09	0.01	1.20	0.065	0.992
Total	**1.34**	**1.39**	**1.23**	**0.09**	**15.57**	**87.06**	**13.08**
PSD Major Source Thresholds	250	250	250	250	250	250	250

(1) PM2.5 listed is direct PM2.5.
(2) VOC PTE is based on existing 326 IAC 8-1-6 BACT limit in the permit.
(3) VOC PTE is based on 326 IAC 8-1-6 VOC BACT Avoidance limits taken by the source.

Federal Rule Applicability Determination

Due to the modification at this source, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this proposed modification.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(b) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Equipment Leaks, 40 CFR 63, Subpart H and 326 IAC 20-11, because pursuant to NESHAP Subpart DD the source must follow the requirements of Subpart H to any equipment that applies.

This source is subject to the following portions of Subpart H:

(1) 40 CFR 63.160(a)
(2) 40 CFR 63.160(f)
(3) 40 CFR 63.162(e)
(4) 40 CFR 63.162(a),(c)
(5) 40 CFR 63.180(d)
(6) 40 CFR 63.181(a)
(7) 40 CFR 63.181(c),(j)
(8) 40 CFR 63.182(a)

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart H.

This is a Title I change. These are new requirements.

(c) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed modification.

Compliance Assurance Monitoring (CAM):

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

(c) Pursuant to 40 CFR 64.2(b)(1)(iii), Acid Rain requirements pursuant to Sections 404, 405, 406, 407(a), 407(b), or 410 of the Clean Air Act are exempt emission limitations or standards. Therefore, CAM was not evaluated for emission limitations or standards for SO_2 and NO_X under the Acid Rain Program.

(d) Pursuant to 40 CFR 64.3(d), if a continuous emission monitoring system (CEMS) is required pursuant to other federal or state authority, the owner or operator shall use the CEMS to satisfy the requirements of CAM according to the criteria contained in 40 CFR 64.3(d).

CAM is unaffected by this modification since this modification was to add a new NESHAP.

State Rule Applicability Determination

Due to the modification at this source, state rule applicability has been reviewed as follows:

326 IAC 2-2 (PSD) and 2-3 (Emission Offset)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of source will emit equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 would apply to the source, however, pursuant to 326 IAC 2-4.1-1(b)(2), because this source is specifically regulated exempt from regulation by NESHAP 40 CFR 63, Subpart V which was issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA, this source is exempt from the requirements of 326 IAC 2-4.1.

326 IAC 2-7-6(5) (Annual Compliance Certification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

There are no new applicable state rules since this modification is to add a new NESHAP to the permit.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure 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.

(a) There are no new Compliance Determination Requirements applicable to this modification. This modification is only to add in a new applicable NESHAP. There are no new testing requirements associated with the addition of this NESHAP.

(b) There are no new Compliance Monitoring Requirements applicable to this proposed modification.

Proposed Changes

The following changes listed below are due to the proposed modification. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) NESHAP 40 CFR 63, Subpart DD, this subpart was recently revised to now reference NESHAP 40 CFR 63, Subpart H, instead of NESHAP 40 CFR 61 Subpart V for equipment leaks from applicable equipment.

~~Attachment A: 40 CFR 61 Subpart V - Standards of Performance for Standards of Performance for Equipment Leaks (Fugitive Emission Sources)~~

Attachment A: 40 CFR 63 Subpart H - National Emission Stands for Hazardous Air Pollutants for Equipment Leaks

A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

...

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD ~~and~~ PP**, and H**, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under 40 CFR 61, Subpart V, 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

...

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is an affected facility.

(m) Product storage tanks:

...

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products

after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

...

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a

450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

...

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD ~~and~~ PP**, and H**, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under 40 CFR 61, Subpart V, 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is an affected facility.

(m) Product storage tanks:

...

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity:

6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative

thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity:

5,100 gallons of process water, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(p) One (1) product shipment loading area for containers, bulk tankers and trucks, with a total capacity of 24,090,000 gallons of products per year, no control.

The regenerative thermal oxidizer (RTO) was approved in 2015 for replacement of the catalytic thermal oxidizer.

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

...

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

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

...

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS
NESHAP 40 CFR 63 ~~61,~~ Subpart ~~V~~ H

Emissions Unit Description:

Pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices.

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected

facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD and PP, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in 1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under ~~40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart DD, this is an affected facility.

(m) Product storage tanks:

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO**,** this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO**,** this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, DD**,** and OO, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart DD, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart DD, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart DD, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity:

10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart DD, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart DD , and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ -NESHAP 40CFR 63, Subpart DD , and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart DD, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** and OO, this is considered an affected facility.

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

~~**National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 14][40 CFR Part 61]**~~

~~E.1.1 General Provisions Relating to the Standards of Performance for Equipment Leaks (Fugitive Emission Sources) [326 IAC 12][40 CFR 61, Subpart A]~~

~~(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 14-8, for the emission units listed above, except as otherwise specified in 40 CFR Part 61, Subpart V.~~

~~(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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~~

~~E.1.2 Standards of Performance for Standards of Performance for Equipment Leaks (Fugitive Emission Sources) [326 IAC 14][40 CFR Part 61, Subpart V]~~

~~The Permittee shall comply with the following provisions of 40 CFR Part 61, Subpart V (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 14-8, for the emission units listed above:~~

~~(1) 40 CFR 61.240~~
~~(2) 40 CFR 61.241~~
~~(3) 40 CFR 61.242-1~~
~~(4) 40 CFR 61.242-2~~
~~(5) 40 CFR 61.242-4~~
~~(6) 40 CFR 61.242-5~~
~~(7) 40 CFR 61.242-6~~
~~(8) 40 CFR 61.242-7~~
~~(9) 40 CFR 61.242-8~~
~~(10) 40 CFR 61.242-9~~
~~(11) 40 CFR 61.242-11~~

~~**Compliance Determination Requirements [326 IAC 2-7-5(1)]**~~

~~E.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]~~

~~No later than one hundred eighty (180) days after the installation of regenerative thermal oxidizer (RTO), the Permittee shall perform the testing required under 40 CFR 61, Subpart V utilizing methods as approved by the Commissioner to document compliance with Condition E.1.2. These tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.~~

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20] [40 CFR 63] [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart H.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.1.2 National Emissions Standards for Organic Hazardous Air Pollutants for Equipments NESHAP [40 CFR Part 63, Subpart H] [326 IAC 20-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart H (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-1, for the emission units listed above:

(1) 40 CFR 63.160(a)
(2) 40 CFR 63.160(f)
(3) 40 CFR 63.162(e)
(4) 40 CFR 63.162(a),(c)
(5) 40 CFR 63.180(d)
(6) 40 CFR 63.181(a)
(7) 40 CFR 63.181(c),(j)
(8) 40 CFR 63.182(a)

...

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP 40 CFR 63, Subpart DD

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of

solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

...

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD ~~and~~ PP**, and H**, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

(j) One (1) over pressurization temporary accumulation vessel, identified as V 61, installed in

1997, capacity: 165 gallons and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through stack RTOS-1.

Under ~~40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(l) One (1) natural gas-fired fume incinerator (regenerative thermal oxidizer), identified as RTO, rated at 2.75 million British thermal units per hour, approved in 2015 for the replacement of catalytic thermal oxidizer, exhausted through Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is an affected facility.

(m) Product storage tanks:

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(31) One (1) product storage tank, identified as TK 51, installed in 1995, capacity: 6,800 gallons of volatile organic compounds and distillation heels and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(32) One (1) product storage tank, identified as TK 52, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(33) One (1) product storage tank, identified as TK 53, installed in 1995, capacity: 6,900 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(The product storage tanks are spent solvents tanks, waste tanks, and products after distillation tanks, etc.)

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **an H**, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984,

capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

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

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SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP, Subpart OO

(m) Product storage tanks:

(21) One (1) product storage tank, identified as TK 30, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts

DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(22) One (1) product storage tank, identified as TK 31, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(23) One (1) product storage tank, identified as TK 32, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(24) One (1) product storage tank, identified as TK 33, installed in 1983, capacity: 6,900 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(25) One (1) product storage tank, identified as TK 34, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(26) One (1) product storage tank, identified as TK 35, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(27) One (1) product storage tank, identified as TK 36, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(28) One (1) product storage tank, identified as TK 37, installed in 1984, capacity: 4,700 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(29) One (1) product storage tank, identified as TK 38, installed in 1983, capacity: 10,000 gallons of spent volatile organic compound waste, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(30) One (1) product storage tank, identified as TK 50, installed in 1992, capacity: 6,900 gallons of waste volatile organic compounds, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

(o) One (1) process water storage tank, identified as TK 42, installed in 1984, capacity: 5,100 gallons of process water, no control.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD**,** ~~and~~ OO**, and H**, this is considered an affected facility.

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

SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP, Subpart PP

(i) One (1) solid dispersion unit, identified as SD 1, consisting of one (1) 250 gallon tub and one (1) dispenser, throughput capacity: 4,800 gallons per day, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks SD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAPs 40 CFR 63, Subparts DD ~~and~~ PP**, and H**, this is considered an affected facility.

(The solid dispersion unit takes all the leftover solids and sludges from various containers and mixes it with a solvent, and then pumps the liquid to storage.)

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

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SECTION E.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: 40 CFR 264, Subpart AA

(a) One (1) vacuum distillation unit, identified as VD 1, installed in 1997, capacity: 9,600 gallons per 24 hours, holding capacity: 3,300 gallons of solvent per batch, consisting of:

(1) One (1) vacuum pot.

(2) One (1) vacuum column.

(3) One (1) vacuum condenser, attached to one (1) 245 gallon distillate receiver, identified as TK 22, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausting through Stacks VD 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(b) One (1) fractionation column No.1, identified as Col 1, attached to a 275-gallon distillate receiver, identified as TK18, installed in 1983, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks CV 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(c) One (1) fractionation column No.2, identified as Col 2, attached to a 275-gallon distillate receiver, identified as TK19, installed in 1984, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch, and equipped with a regenerative thermal oxidizer as control, identified as RTO exhausted through Stacks CV 2 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(d) One (1) vacuum pump, identified as VP 1, installed in 1994, capacity: 275 cubic feet per minute peak and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks VP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(e) One (1) pot still, identified as DP 1, installed in 1992, attached to a 275-gallon distillate receiver, identified as TK20, throughput capacity: 9,600 gallons of solvent per 24 hours, holding capacity: 3,300 gallons of solvent per batch and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stack DP 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(f) One (1) thin film evaporator No.1, identified as TF 1, installed in 1984, throughput capacity: 14,400 gallons of solvent per twenty-four (24) hour period, equipped with a 450-gallon day tank, and equipped with a regenerative thermal oxidizer as control, identified as RTO, exhausted through Stacks TF 1 and RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA this is considered an affected facility.

(g) One (1) thin film evaporator No. 2, identified as TF 2, approved in 2015 for construction, throughput capacity of 14,400 gallons of waste solvent per 24 hours, equipped with a 350-gallon day tank, controlled by regenerative thermal oxidizer, identified as RTO, and exhausting to stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(n) Tanks and Mixers

(1) One (1) waste tank with mixer, identified as TK 39, installed in 2002, capacity: 10,500 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, this is considered an affected facility.

(This tank received materials that aren't being recycled, materials from the shar tub, and the still bottoms from TK 40 -TK 44.)

(2) One (1) still bottoms tank with mixer, identified as TK 40, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(3) One (1) still bottoms tank with mixer, identified as TK 41, installed in 1984, capacity: 3,100 gallons of spent volatile organic compound waste and still bottoms, and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V,~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(4) One (1) still bottoms tank with mixer, identified as TK 43, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

(5) One (1) still bottoms tank with mixer, identified as TK 44, constructed in 2012, capacity: 3,100 gallons of volatile organic compounds and vented to a regenerative thermal oxidizer as control, identified as RTO, exhausted to Stack RTOS-1.

Under ~~NESHAP 40 CFR 61, Subpart V and~~ NESHAP 40 CFR 63, Subpart**s** DD **and H**, and the Resources Conservation Recovery Act, 40 CFR 264, Subpart AA, this is considered an affected facility.

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

Additional Changes

IDEM, OAQ made additional changes to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

(1) After discussions with EPA, OAQ decided to add a rule cite for the Compliance Determination Requirements subsection title in the D Sections. The addition of this rule cite is to satisfy EPA's concerns.

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

(2) IDEM revised Sections E.2 to E.6 for clarity.

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20] [40 CFR 63] [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to ~~NESHAP, Subpart DD~~**National Emission Standards for Hazardous Air Pollutants Under 40 CFR Part 63** [40 CFR 63, Subpart A] [326 IAC 20-1]

~~The provisions of 40 CFR 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, apply to the affected source except when otherwise specified in 40 CFR 63, Subpart DD for VD 1, Col 1, Col 2, VP 1, DP 1, TF 1, TF 2, RTO, TK 18, TK 19, TK 20, TK 22, TK 30, TK 31, TK 32, TK 33, TK 34, TK 35, TK 36, TK 37, TK 38, TK 39, TK 40, TK 41, TK 42, TK43, TK 44, TK 50, TK 51, TK 52, TK 53, V 61, and SD 1.~~

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart PP.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.2.2 ~~NESHAP for [40 CFR 63, Subpart DD] [326 IAC 20-23]~~**National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations[40 CFR Part 63, Subpart PP] [326 IAC 20-23]**

~~Permittee shall comply with the provisions of 40 CFR 63, Subpart DD, which are incorporated by reference as 326 IAC 20-23 for the VD 1, Col 1, Col 2, VP 1, DP 1, TF 1, TF 2, RTO, TK 18, TK 19, TK 20, TK 22, TK 30, TK 31, TK 32, TK 33, TK 34, TK 35, TK 36, TK 37, TK 38, TK 39, TK 40, TK 41, TK 42, TK43, TK 44, TK 50, TK 51, TK 52, TK 53, V 61, and SD 1 (included as Attachment B of this permit) as specified as follows.~~

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DD (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 20-23, for the emission units listed above:

(1) 40 CFR 63.680
(2) 40 CFR 63.681
(3) 40 CFR 63.683
(4) 40 CFR 63.685
(5) 40 CFR 63.688
(6) 40 CFR 63.689
(7) 40 CFR 63.690
(8) 40 CFR 63.691
(9) 40 CFR 63.693
(10) 40 CFR 63.694
(11) 40 CFR 63.695
(12) 40 CFR 63.696
(13) 40 CFR 63.697
(14) 40 CFR 63.698
(15) Table 1
(16) Table 2
(17) Table 3

...

National Emission Standards for Hazardous Air Pollutants (NESHAPs) [326 IAC 20] [40 CFR Part 63] [326 IAC 2-7-5(1)]

E.3.1 ~~NESHAP, Subpart OO, Requirements [40 CFR 63, Subpart OO] [326 IAC 20-35]~~ **General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

~~Pursuant to 40 CFR 63, Subpart OO, the Permittee shall comply with the provisions of 40 CFR 63, Subpart OO, which are incorporated by reference as 326 IAC 20-35 for the eleven (11) storage tanks, identified as TK 30, TK 31, TK 32, TK 33, TK 34, TK 35, TK 36, TK 37, TK 38, TK 42, and TK 50, as specified as follows.~~

~~40 CFR 63.900~~
~~40 CFR 63.901~~
~~40 CFR 63.902~~
~~40 CFR 63.905~~
~~40 CFR 63.906~~
~~40 CFR 63.907~~
~~40 CFR 63.908~~

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart OO.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.3.2 National Emission Standrs for Tanks - Level 1 NESHAP [40 CFR Part 63, Subpart OO] [326 IAC 20-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart OO (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 20-1, for the emission units listed above:

(1) 40 CFR 63.900
(2) 40 CFR 63.901
(3) 40 CFR 63.902
(4) 40 CFR 63.905
(5) 40 CFR 63.906
(6) 40 CFR 63.907
(7) 40 CFR 63.908

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E.3.~~2~~**3** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 20] [40 CFR Part 63] [326 IAC 2-7-5(1)]

E.4.1 ~~NESHAP, Subpart PP, Requirements [40 CFR 63, Subpart PP] [326 IAC 20-36]~~ **General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

~~Pursuant to 40 CFR 63, Subpart PP, the Permittee shall comply with the provisions of 40 CFR 63, Subpart PP, which are incorporated by reference as 326 IAC 20-36 for the solid dispersion unit, identified as SD 1, as specified as follows:~~

~~40 CFR 63.920~~
~~40 CFR 63.921~~
~~40 CFR 63.924~~
~~40 CFR 63.925~~
~~40 CFR 63.926~~
~~40 CFR 63.929~~

(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart PP.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.4.2 National Emissions Standards for Containers NESHAP [40 CFR Part 63, Subpart PP] [326 IAC 20-36]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart PP (included as Attachment D to the operating permit), which are incorporated by reference as 326 IAC 20-36, for the emission units listed above:

(1) 40 CFR 63.920
(2) 40 CFR 63.921
(3) 40 CFR 63.924
(4) 40 CFR 63.925
(5) 40 CFR 63.926
(6) 40 CFR 63.929

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

E.4.~~2~~**3** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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Resources Conversation Recovery Act (RCRA) Requirements

E.5.1 Resources Conservation Recovery Act [40 CFR Part 264, Subpart AA]

Pursuant to 40 CFR Part 264, Subpart AA, the Permittee shall comply with the provisions of 40 CFR Part 264, Subpart AA (included as Attachment E to the operating permit), for the process vents from VD 1/TK 22, Col1/TK 18, Col2/TK 19, VP 1, DP 1/TK 20, TF 1, TF 2, RTO, TK 40, TK 41, TK43, TK-44, and V 61, as specified as follows.

(1) 40 CFR 264.1030
(2) 40 CFR 264.1031
(3) 40 CFR 264.1032

(4) 40 CFR 264.1033
(5) 40 CFR 264.1034
(6) 40 CFR 264.1035
(7) 40 CFR 264.1036

...

E.6.1 General Provisions Relating to ~~NESHAP, Subpart DDDDD~~ **National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63** [40 CFR 63, Subpart A] [326 IAC 20-1]

(a) Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in 40 CFR Part 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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~~

E.6.2 **National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters** NESHAP for [40 CFR 63, Subpart DDDDD]

Permittee shall comply with the provisions of 40 CFR 63, Subpart DDDDD, which are incorporated by reference as 326 IAC 20-95 for the two boilers (included as Attachment F of this permit) as specified as follows.

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a), (d)
(4) 40 CFR 63.7495(a), (b), and (d)
(5) 40 CFR 63.7499
(6) 40 CFR 63.7500
(7) 40 CFR 63.7505
(8) 40 CFR 63.7510
(9) 40 CFR 63.7522
(10) 40 CFR 63.7530(d)
(11) 40 CFR 63.7540
(12) 40 CFR 63.7545
(13) 40 CFR 63.7550
(14) 40 CFR 63.7555
(15) 40 CFR 63.7560
(16) 40 CFR 63.7565
(17) 40 CFR 63.7570
(18) 40 CFR 63.7575
(19) Table 1 to 40 CFR 63

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 18, 2016.

The staff recommends to the Commissioner that the Part 70 Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Nicholas Eilerman 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) 234-5373 or toll free at 1-800-451-6027, extension 4-5373.

(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 Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

TSD Appendix A: Emissions Calculations
Summary

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Uncontrolled Potential Emissions (tons/yr)

Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Methylene Chloride	Styrene	Hydro-quinone	Toluene	Benzene	Dichloro-benzene	Formaldehyde	Hexane	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Product Shipment Loading	0.00	0.00	0.00	0.00	0.00	28.34	0.00	60.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.5
Vacuum Distillation VD1	0.00	0.00	0.00	0.00	0.00	10.43	0.00	0.00	3.07	0.042	1.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.72
Recovery Processing Col 1, Col2, TF1	0.00	0.00	0.00	0.00	0.00	16.5	0.00	66.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.87
Pot Still DP 1	0.00	0.00	0.00	0.00	0.00	30.8	0.00	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.40
Molecular seive dryer MS1	0.00	0.00	0.00	0.00	0.00	11.13	0.00	5.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.15
Solid Dispersion Unit, SD 1	0.00	0.00	0.00	0.00	0.00	5.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drums emtrying into tanks	0.00	0.00	0.00	0.00	0.00	23.0	0.00	13.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.1
All Storage Tanks (except TK43 and TK44)	0.00	0.00	0.00	0.00	0.00	33.7	0.00	64.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.1
TK43 and TK44 and Mixers	0.00	0.00	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.88	0.00	0.00	0.00	0.00	0.00	23.88
Pipes Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
new thin film evaporator No. 2 (TF 2)	0.00	0.00	0.00	0.00	0.00	38.09	0.00	38.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.09
Combustion	0.27	1.09	1.09	0.09	14.39	0.79	12.09	0.00	0.00	0.00	0.0005	0.0003	0.0002	0.011	0.259	0.0001	0.0002	0.0002	0.00005	0.0003	0.272
GM-1	0.00	0.00	0.00	0.00	0.00	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	1.04	0.21	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTO	0.02	0.09	0.09	0.01	1.18	0.06	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
Total for Source	**1.34**	**1.39**	**1.23**	**0.09**	**15.57**	**226.31**	**13.08**	**270**	**3.07**	**0.042**	**1.61**	**0.0003**	**0.0002**	**0.011**	**24.144**	**0.0001**	**0.0002**	**0.0002**	**0.0001**	**0.0003**	**299**

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Potential Emissions After Issuance (tons/yr)

Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Methylene Chloride	Styrene	Hydro-quinone	Toluene	Benzene	Dichloro-benzene	Formaldehyde	Hexane	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Product Shipment Loading	0.0	0.0	0.0	0.0	0.0		0.00	60.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.5
Vacuum Distillation VD1	0.0	0.0	0.0	0.0	0.0		0.00	0.0	3.07	0.042	1.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.72
Recovery Processing Col 1, Col2, TF1	0.0	0.0	0.0	0.0	0.0		0.00	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
Pot Still DP 1	0.0	0.0	0.0	0.0	0.0		0.00	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.40
Molecular seive dryer MS1	0.0	0.0	0.0	0.0	0.0	58.9	0.00	5.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.15
Solid Dispersion Unit, identified as EU-SD 1	0.0	0.0	0.0	0.0	0.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drums emtrying into tanks	0.0	0.0	0.0	0.0	0.0		0.00	13.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.14
All Storage Tanks (except TK43 and TK44)	0.0	0.0	0.0	0.0	0.0		0.00	53.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.21
TK43 and TK44 and Mixers	0.0	0.0	0.0	0.0	0.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00	1.19
Pipes Fugitive Emissions	0.0	0.0	0.0	0.0	0.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
new thin film evaporator No. 2 (TF 2)	0	0	0	0	0	24.99	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.99
Combustion	0.273	1.094	1.094	0.086	14.4	0.791	12.09	0.00	0.00	0.00	0.0005	0.0003	0.0002	0.011	0.259	0.0001	0.0002	0.0002	0.00005	0.0003	0.272
GM-1	0.00	0.00	0.00	0.00	0.00	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Roads	1.04	0.21	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTO	0.02	0.09	0.09	0.01	1.18	0.06	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
Total for Source	**1.34**	**1.39**	**1.23**	**0.09**	**15.57**	**87.06**	**13.08**	**180.69**	**3.07**	**0.04**	**1.61**	**0.00**	**0.00**	**0.01**	**1.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**187**

TSD Appendix A: Emissions Calculations

Product shipment Load Out

Company Name: **Reclaimed Energy, Division of Superior Oil Company, Inc.**
Address City IN Zip: **1500 Western Avenue, Connersville, Indiana 47331**
Significant permit modification: **041-36969-00015**
Reviewer: **Nicholas Eilerman**

VOC and HAPs Emissions from Drum Filling for Load out of Shipments

Material Name	Initial Volume of Vapor Space (gal)	Volume Handled (gal/yr)	Volume % Drums	Conainers Tankers Volume (gal/yr)	Molecular Weight Mv	Vapor Pressure (psi)	VOC or HAP Emissions (lb/yr)	VOC or HAP Emissions (tons/yr)
Ethyl Acetate (VOC)	55	15,330,000	100%	15,330,000	88	1.78	56684	28.3
Methylene Chloride (HAP)	55	8,760,000	100	8,760,000	85	6.88	120929	60.5

METHODOLOGY

VOC or HAP Emissions (lbs/yr) = (Volume Handled (gal)/7.48 gal/cf))*(Vapor pressure (psi)/14.7))*(Molecular Weight (g/mol))*492*(68+460)
VOC or HAP Emissions (tons/yr) = VOC or HAP Emissions (lbs/yr) / 2,000 lbs/ton
The above information is from T 041-21620-00015, issued on August 21, 2008

TSD Appendix A: Emissions Calculations
Vacuum distillation

Company Name: **Reclaimed Energy, Division of Superior Oil Company, Inc.**
Address City IN Zip: **1500 Western Avenue, Connersville, Indiana 47331**
Significant permit modification: **041-36969-00015**
Reviewer: **Nicholas Eilerman**

VOC/HAP Emissions Associated with Recovery Processing - Vacuum Distillation Unit VD 1

Step 1 - Unit Operation Start Up Emissions

Production System Unit No.	Vacuum Column	Vacuum Column	Vacuum Column	Vacuum Column	Vacuum Column
Material Processed	S-280 Blend (VOC)	Styrene Component (HAP)	Hydroquinone Component (HAP)	Ethyl Acetate (VOC)	Toluene (HAP)
System at rest air volume (cf)	620	620	620	620	620
System at rest air volume (gal)	4637.6	4637.6	4637.6	4637.6	4637.6
Material molecular weight	150	104	110	88	92
Material vapor pressure (psi)	0.01	0.077	0.001	1.78	0.6
Condensor Recovery Efficiency (%)	97.0%	97.0%	97.0%	97.0%	97.0%
Annual Volume Processed (gal)	869,000	220,000	11,000	1,100,000	1,100,000
Batch Volume Processed (gal)	3,000	600	60	3,000	3,000
Emissions (lbs/yr)	1.43	9.64	0.066	189	66.5

Step 2 - Vent Emissions after Start Up

Production System Unit No.	Vacuum Column	Vacuum Column	Vacuum Column	Vacuum Column	Vacuum Column
Material Processed	S-280 Blend (VOC)	Styrene Component (HAP)	Hydroquinone Component (HAP)	Ethyl Acetate (VOC)	Toluene (HAP)
Estimated Vent Flow Rate (cfm)	10	10	10	0.5	0.5
Material Molecular Weight	150	104	110	88	92
Material Vapor Pressure (psi)	0.01	0.077	0.001	2.57	0.77
Exhaust Temperature (deg F)	180	180	180	90	90
Production Rate (gal/hr)	125	25	1.25	125	125
Annual Operations (hrs/yr)	8,760	8,760	8,760	8,760	8,760
Uncontrolled VOC or HAP Emissions (lbs/yr)	1148.5	6131.3	84.2	10075	3156
HAP Emissions (tons/yr)	0.574	3.07	0.042	5.04	1.58

Step 2 - Vent Emissions after Startup
Uncontrolled VOC or HAP emissions (lbs/yr) = (Vent flow rate * 60 min/hr) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/Exhaust Temp +460) * annual operating hours

For Both Steps:
Uncontrolled VOC or HAP Emissions (tons/yr) = Uncontrolled VOC or HAP Emissions (lbs/yr) / 2,000 lbs/ton
Controlled VOC or HAP Emissions (lbs/yr) = Uncontrolled VOC Emissions (tons/yr) * (1-Control Efficiency)
Controlled VOC or HAP Emissions (tons/yr) = Controlled VOC or HAP Emissions (lbs/yr) / 2,000 lbs/ton

TSD Appendix A: Emissions Calculations
VOC Emissions with Recovery Processes

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

VOC Emissions from Recovery Processes (Col 1, Col 2, DP 1, TF 1, and TF 2)

Step 1 - Unit Operation Start Up Emissions

Production System No.	Col 1	Col 2	TF 1	-	Total
Material Processed	Ethyl Acetate	Ethyl Acetate	Ethyl Acetate	-	
System at Rest Air Volume (cf)	667	719	33	-	
System at Rest Air Volume (gal/yr)	4989	5378	247	-	
Material Molecular Weight (g/mol)	88	88	88	-	
Material Vapor Pressure (psi)	1.78	1.78	1.78	-	
Condensor Recovery Efficiency (%)	97	97	97	-	
Annual Volume Processed (gal/yr)	3,066,000	3,066,000	3,066,000	-	9,198,000
Batch Volume Processed (gal)	3,000	3,000	6,800	-	
Uncontrolled VOC Emissions (lbs/yr)	566	610	12.3	-	1188
Uncontrolled VOC Emissions (tons/yr)	**0.283**	**0.305**	**0.006**	-	**0.594**
Control Effciency (%)	98.0%	98.0%	98.0%	-	
Controlled VOC Emissions (lbs/yr)	11.3	12.2	0.247	-	23.8
Controlled Emissions (tons/yr)	**0.006**	**0.006**	**0.0001**	-	**0.012**

Step 2 - Vent Emissions after Start Up

Production System No.	Col 1	Col 2	TF 1	-	Total
Processed	Ethyl Acetate	Ethyl Acetate	Ethyl Acetate	-	
Estimated Vent Flow	0.525	0.525	0.525	-	
Molecular Weight	88	88	88	-	
Vapor Pressre	2.57	2.57	2.57	-	
Exhaust Temperat	90	90	90	-	
n Rate (gal/hr)	350	350	350	-	
Operation (hrs/yr)	8,760	8,760	8,760	-	26,280
led VOC Emission	10578	10578	10578	-	31735
Uncontrolled	**5.29**	**5.29**	**5.29**	-	**15.9**
Control Efficiency	98.00%	98.00%	98.00%	-	
d VOC Emission	212	212	212	-	635
d VOC Emissio	**0.106**	**0.106**	**0.106**	-	**0.317**

Total VOC Emissions from each Step

Production System No.	Col 1	Col 2	TF 1	-	Total
Uncontrolled VOC Emissions (lbs/yr)	11144	11188	10590.8	-	32923
Uncontrolled VOC Emissions (tons/yr)	5.57	5.59	5.30	-	**16.5**
Controlled VOC Emissions (lbs/yr)	223	224	212	-	658
Controlled VOC Emissions (tons/yr)	**0.111**	**0.112**	**0.106**	-	**0.329**

METHODOLOGY

Step 1 - Start Up Emissions
Uncontrolled VOC Emissions (lbs/yr) = (System at rest air volume/7.48 gal/cf) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/T+460)
where:
359 = volume in cubic feet occupied by 1 mole of an ideal gas at standard temperature at pressure and T = 68 degrees F

Step 2 - Vent Emissions after Startup
Uncontrolled VOC emissions (lbs/yr) = (Vent flow rate * 60 min/hr) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/Exhaust Temp +460) * annual operating hours

For Both Steps:
Uncontrolled VOC Emissions (tons/yr) = Uncontrolled VOC Emissions (lbs/yr) / 2,000 lbs/ton
Controlled VOC Emissions (lbs/yr) = Uncontrolled VOC Emissions (tons/yr) * (1-Control Efficiency)
Controlled VOC Emissions (tons/yr) = Controlled VOC Emissions (lbs/yr) / 2,000 lbs/ton

TSD Appendix A: Emissions Calculations
HAP Emissions with Recovery Processes

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

HAP Emissions from Recovery Processes (Col 1, Col 2, TF 1, and TF 2)

Step 1 - Unit Operation Start Up Emissions

Production System No.	Col 1	Col 2	TF 1	-	Total
Material Processed	Methylene Chloride	Methylene Chloride	Methylene Chloride	-	
System at Rest Air Volume (cf)	667	719	33	-	
System at Rest Air Volume (gal)	4989	5378	247	-	
Material Molecular Weight (g/mol)	85	85	85	-	
Material Vapor Pressure (psi)	6.88	6.88	6.88	-	
Condensor Recovery Efficiency (%)	97	97	97	-	5,256,000
Annual Volume Processed (gal/yr)	1,752,000	1,752,000	1,752,000	-	
Batch Volume Processed (gal)	3,000	3,000	6,800	-	
Uncontrolled HAP Emissions (lbs/yr)	1207	1301	26.3	-	2533.74
Uncontrolled HAP Emissions (tons/yr)	**0.603**	**0.650**	**0.013**	-	**1.27**
Control Effciency (%)	98.0%	98.0%	98.0%	-	
Controlled HAP Emissions (lbs/yr)	24.1	26.0	0.527	-	50.7
Controlled HAP Emissions (tons/yr)	**0.012**	**0.013**	**0.0003**	-	**0.025**

Step 2 - Vent Emissions after Start Up

Production System No.	EU-Col 1	EU-Col 2	EU-TF 1	-	Total
Material Processed	Methylene Chloride	Methylene Chloride	Methylene Chloride	-	
Estimated Vent Flow Rate (cfm)	0.525	0.525	0.525	-	
Material Molecular Weight	85	85	85	-	
Material Vapor Pressre (psi)	11	11	11	-	
Exhaust Temperature (deg F)	90	90	90	-	
Production Rate (gal/hr)	200	200	200	-	
Annual Operation (hrs/yr)	8,760	8,760	8,760	-	**26,280**
Uncontrolled HAP Emissions (lbs/yr)	43734	43734	43734	-	**131201**
Uncontrolled HAP Emissions	**21.9**	**21.9**	**21.9**	-	**66**
Control Efficiency (%)	98.0%	98.0%	98.0%	-	
Controlled HAP Emissions (lbs/yr)	875	875	875	-	**2624**
Controlled HAP Emissions (tons/yr)	**0.437**	**0.437**	**0.437**	-	**1.31**

Total HAP Emissions from each Step

Production System No.	Col 1	Col 2	TF 1	-	Total
Uncontrolled HAP Emissions (lbs/yr)	44940	45035	43760	-	**133735**
Uncontrolled HAP Emissions (tons/yr)	22.5	22.5	21.9	-	**66.9**
Controlled HAP Emissions (lbs/yr)	899	901	875	-	**2675**
Controlled HAP Emissions (tons/yr)	0.449	0.450	0.4376	-	**1.34**

METHODOLOGY

Step 1 - Start Up Emissions
Uncontrolled HAP Emissions (lbs/yr) = (System at rest air volume/7.48 gal/cf) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/T+460)
where:
359 = volume in cubic feet occupied by 1 mole of an ideal gas at standard temperature at pressure and T = 68 degrees F

Step 2 - Vent Emissions after Startup
Uncontrolled HAP emissions (lbs/yr) = (Vent flow rate * 60 min/hr) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/Exhaust Temp +460) * annual operating hours

For Both Steps:
Uncontrolled HAP Emissions (tons/yr) = Uncontrolled HAP Emissions (lbs/yr) / 2,000 lbs/ton
Controlled HAP Emissions (lbs/yr) = Uncontrolled HAP Emissions (tons/yr) * (1-Control Efficiency)
Controlled HAP Emissions (tons/yr) = Controlled HAP Emissions (lbs/yr) / 2,000 lbs/ton

TSD Appendix A: Emissions Calculations
VOC and HAPs Emissions from Product Drying

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

VOC and HAPS Emissions from Product Drying - MS 1

Step 1 - Unit Operation Start Up Emissions

Production System Unit No.	Molecular Sieve Dryer (MS 1)	Molecular Sieve Dryer (MS 1)
Material Processed	Ethyl Acetate (VOC)	Methylene Chloride (HAP)
System at rest air volume (gal)	750	750
Material Molecular Weight	88	85
Material Vapor Pressure (psi)	1.78	6.88
Condensor Recovery Efficiency	97.00%	97.00%
Annual Volume Processed (gal/yr)	15,330,000	8,760,000
Batch Volume Processed (gal/batch)	2,500	4,000
VOC Emissions (lb/yr)	510	680
VOC Emissions (ton/yr)	**0.255**	**0.340**

Step 2 - Emissions from Drier Bed Regeneration

Production System Unit No.	Molecular Sieve Dryer (MS 1)	Molecular Sieve Dryer (MS 1)
Material Processed	Ethyl Acetate (VOC)	Methylene Chloride (HAP)
Annual Volume Processed (gal)	15,330,000	8,760,000
Estimated portion retained in resin bed (%)	1.00%	1.00%
out during regeneration (gal)	1,143,618	962,724
Estimated portion recaptured (%)	99.0%	99.0%
VOC Emissions (lbs/yr)	11436	9627
VOC Emissions (ton/yr)	**5.72**	**4.81**

Totals from each Step

Production System Unit No.	Molecular Sieve Dryer (MS 1)	Molecular Sieve Dryer (MS 1)	Total
VOC Emissions (lb/yr)	11946	10307	22254
VOC Emissions (tons/yr)	**5.97**	**5.15**	**11.1**

METHODOLOGY

Step 1 - Start Up Emissions
Uncontrolled VOC Emissions (lbs/yr) = (System at rest air volume/7.48 gal/cf) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/T+460)
where:
359 = volume in cubic feet occupied by 1 mole of an ideal gas at standard temperature at pressure and T = 68 degrees F

Step 2 - Emissions from Drier Bed Regeneration
Uncontrolled VOC Emissions (lbs/yr) = Solvent driven out during regeneration * (1-Estimated portion recaptured)

For Both Steps:
Uncontrolled VOC Emissions (tons/yr) = Uncontrolled VOC Emissions (lbs/yr) / 2,000 lbs/ton

TSD Appendix A: Emissions Calculations
Solid Dispersion Unit

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

VOC Emissions associated with SD 1

Amount of Solvent Used Per Mix (gal)	Times thinned per day	Total Thinned Per Day (gal/day)	Annual Throughput of Solvent (gal/yr)	Density of Solvent (lbs/gal)	Weight of Throughput of Solvent (lbs/yr)	Weight of Throughput of Solvent (tons/yr)	Emission factor (lbs VOC/ton of solvent)	Uncontrolled VOC Emissions (lbs/yr)	Uncontrolled VOC Emissions (tons/yr)	Control Efficiency	Controlled VOC Emissions (lbs/yr)	Controlled VOC Emissions (tons/yr)
100	3.00	300	109500	7.00	766500	383	30.0	11498	5.75	95.0%	575	0.287

METHODOLOGY

The solid dispersion unit takes all the leftover solids from the storage tanks at the source, mixes it with a solvent, and then pumps the liquid to storage, shipment, or other operations. The VOC vapors are vented out thru the thermal oxidzier. This process can be likened to the mixing of paint and emission factors from AP-42, Chapter 6.4, Table 6.4-1 were used.

Emission Factor (lbs VOC/ton of product) = 30.0 lbs VOC/ton of product

Uncontrolled VOC Emissions (lbs/yr) = Throughput of solvent (tons/yr) * Emission Factor (lbs VOC/ton of solvent)
Uncontrolled VOC Emissions (tons/yr) = Uncontrolled VOC Emissions (lbs/yr) / 2,000 lbs/ton
Controlled VOC Emissions (lbs/yr) = Uncontrolled VOC Emissions (lbs/yr) * (1- Control Efficiency)
Controlled VOC Emissions (tons/yr) = Controlled VOC Emissions/2,000 lbs/ton

TSD Appendix A: Emissions Calculations
Drum Emptying into Tanks Emissions

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Drum Emptying Emissions into bulk storage tanks

Material Name	Volume Handled (gallons/yr)	VOC/HAP Emission Factor (lbs/gallon)	Uncontrolled VOC or HAP Emissions (lbs/year)	Uncontrolled VOC or HAP Emissions (tons/yr)	Control Efficiency	Controlled VOC or HAP Emissions (lbs/yr)	Controlled VOC or HAP Emissions (tons/yr)
Ethyl Acetate (VOC)	15,330,000	0.003	45990	23.0	92.0%	3679	1.84
Methylene Chloride (HAP)	8,760,000	0.003	26280	13.1	92.0%	2102	1.05

METHODOLOGY

No AP-42 emission factors were available, so VOC emissions are based on a source engineering estimate.
The control efficiency for a catalytic thermal oxidizer.
Uncontrolled VOC or HAP Emissions (lbs/yr) = Volume handled (gallons) * VOC or HAP Emission Factor (lbs/gal)
Uncontrolled VOC or HAP Emissions (tons/yr) = Uncontrolled VOC or HAP Emissions (lbs/yr)/2000 lbs/ton

TSD Appendix A: Emissions Calculations
Tank VOC Emissions - Potential to Emit

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Tank Number	Product Stored	Losses (Tons per Year)		PTE VOC Emissions	Control Efficiency	Controlled VOC Emissions
		Breathing	Working	(tons/yr)	(tons/yr)	(tons/yr)
TK-1	Ethyl Acetate	0.030	1.12	1.15	none	1.15
TK-2	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-3	Ethyl Acetate	0.040	0.961	1.00	none	1.00
TK-4	Ethyl Acetate	0.028	0.961	0.989	none	0.989
TK-5*	Ethyl Acetate	n/a	n/a	1.44	none	1.44
TK-6	Ethyl Acetate	0.004	0.160	0.164	none	0.164
TK-7	Ethyl Acetate	0.008	0.231	0.238	none	0.238
TK-8	Ethyl Acetate	0.008	0.231	0.238	none	0.238
TK-9	Ethyl Acetate	0.010	0.256	0.266	none	0.266
TK-10	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-11	Ethyl Acetate	0.023	0.481	0.504	none	0.504
TK-12	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-13	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-14	Ethyl Acetate	0.024	1.04	1.07	none	1.07
TK-15	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-16	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-17	Ethyl Acetate	0.040	1.04	1.08	none	1.08
TK-21	Mineral Spirits	0.001	0.07	0.07	none	0.07
TK-23	Trichloroethylene	0.030	1.84	1.87	none	1.87
TK-24	1,1,1 Trichloroethylene	0.030	1.84	1.87	none	1.87
TK-25	Trichloroethylene	0.030	1.84	1.87	none	1.87
TK-30	Ethyl Acetate	0.029	0.877	0.906	none	0.906
TK-31	Ethyl Acetate	0.029	0.877	0.906	none	0.906
TK-32	Ethyl Acetate	0.029	0.877	0.906	none	0.906
TK-33	Ethyl Acetate	0.029	0.877	0.906	none	0.906
TK-34	Ethyl Acetate	0.024	0.597	0.621	none	0.621
TK-35	Ethyl Acetate	0.024	0.597	0.621	none	0.621
TK-36	Ethyl Acetate	0.024	0.597	0.621	none	0.621
TK-37	Ethyl Acetate	0.024	0.597	0.621	none	0.621
TK-38	Ethyl Acetate	0.052	1.27	1.32	none	1.32
TK-39	Ethyl Acetate	0.058	1.52	1.58	98.0%	0.032
TK-40	Ethyl Acetate	0.013	0.370	0.382	98.0%	0.008
TK-41	Ethyl Acetate	0.013	0.370	0.382	98.0%	0.008
TK-50	Ethyl Acetate	0.028	0.877	0.905	none	0.382
TK-51	Ethyl Acetate	0.029	0.864	0.892	98%	0.018
TK-52	Ethyl Acetate	0.028	0.877	0.905	98%	0.018
TK-53	Ethyl Acetate	0.028	0.877	0.905	98%	0.018
	TOTALS	**1.002**	**31.2**	**33.7**		**28.2**

METHODOLOGY

*Tank TK-5 emissions taken from the letter from AA 041-18959-00015, issued on May 12, 2004.
IDEM, OAQ has calculated all storage tanks emissions using calculations provided by the applicant. All emissions calculations are based on the maximum throughput for each tank.
Please note that the aboved references tanks also store methylene chloride, which is not classifed as a VOC by the US EPA. However, it is classifed as a HAP and its emissions calculations are provided on page X of this document.

TSD Appendix A: Emissions Calculations

Tank HAP Emissions - Potential to Emit

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Tank Number	Product Stored	Weight % Methylene Chloride	Breathing Losses (tons/yr)	Working Losses (tons/yr)	Methylene Chloride Emissions (tons/yr)	Control Efficiency	Controlled Methylene Chloride Emissions (tons/yr)
TK-1	Methylene Chloride	100%	0.095	2.22	2.32	none	2.32
TK-2	Methylene Chloride	100%	0.135	2.22	2.36	none	2.36
TK-3	Methylene Chloride	100%	0.136	2.04	2.18	none	2.18
TK-4	Methylene Chloride	100%	0.095	2.05	2.14	none	2.14
TK-5	Methylene Chloride	100%	0.042	0.683	0.725	none	0.72
TK-6	Methylene Chloride	100%	0.013	0.342	0.355	none	0.35
TK-7	Methylene Chloride	100%	0.026	0.492	0.518	none	0.52
TK-8	Methylene Chloride	100%	0.026	0.492	0.518	none	0.52
TK-9	Methylene Chloride	100%	0.033	0.547	0.579	none	0.58
TK-10	Methylene Chloride	100%	0.136	2.22	2.36	none	2.36
TK-11	Methylene Chloride	100%	0.079	1.03	1.10	none	1.10
TK-12	Methylene Chloride	100%	0.136	2.22	2.36	none	2.36
TK-13	Methylene Chloride	100%	0.136	2.22	2.36	none	2.36
TK-14	Methylene Chloride	100%	0.083	2.22	2.30	none	2.30
TK-15	Methylene Chloride	100%	0.136	2.22	2.36	none	2.36
TK-16	Methylene Chloride	100%	0.136	2.22	2.36	none	2.36
TK-17	Methylene Chloride	100%	0.136	2.22	2.36	none	2.36
TK-23	Methylene Chloride	100%	0.030	1.84	1.87	none	1.87
TK-24	Methylene Chloride	100%	0.030	1.84	1.87	none	1.87
TK-25	Methylene Chloride	100%	0.030	1.84	1.87	none	1.87
TK-30	Methylene Chloride	100%	0.099	1.87	1.97	none	1.97
TK-31	Methylene Chloride	100%	0.099	1.87	1.97	none	1.97
TK-32	Methylene Chloride	100%	0.099	1.87	1.97	none	1.97
TK-33	Methylene Chloride	100%	0.099	1.87	1.97	none	1.97
TK-34	Methylene Chloride	100%	0.081	1.27	1.35	none	1.35
TK-35	Methylene Chloride	100%	0.081	1.27	1.35	none	1.35
TK-36	Methylene Chloride	100%	0.081	1.27	1.35	none	1.35
TK-37	Methylene Chloride	100%	0.081	1.27	1.35	none	1.35
TK-38	Methylene Chloride	100%	0.178	2.71	2.89	none	2.89
TK-39	Methylene Chloride	100%	0.196	3.25	3.45	98.0%	0.069
TK-40	Methylene Chloride	100%	0.043	0.840	0.883	98.0%	0.018
TK-41	Methylene Chloride	100%	0.043	0.840	0.883	98.0%	0.018
TK-50	Methylene Chloride	100%	0.096	1.87	1.97	none	1.97
TK-51	Methylene Chloride	100%	0.098	1.84	1.94	98.0%	0.039
TK-52	Methylene Chloride	100%	0.096	1.87	1.97	98.0%	0.039
TK-53	Methylene Chloride	100%	0.096	1.87	1.97	98.0%	0.039
		TOTAL	**3.23**	**60.8**	**64.1**		**53.2**

METHODOLOGY

Methylene Chloride is the only HAP stored in the tanks at the source. The emissions above were provided by the applicant based on the maximum throughput of each tank.

TSD Appendix A: Emissions Calculations

Still Bottoms Tanks TK43 and TK44 with Mixers

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

	Output Product Name Potential to Emit	Qty (lb)	Sp. Gr.	Qty (gal)	Time (min)	MW	Vp	Kx	Loading Emm (lbs)	Blending Emissions	Total Emissions (lbs/yr)	After oxidizer (lbs/yr)
		Mixing Emissions										
PTE	stillbottoms	1,403,666	0.672	250,755.000	35,000	86	5	0.00043384	1520.94	2411.07	3932.01	**196.60**
	stillbottoms	13,122,135	0.672	2,344,176.000	490,000	86	5	0.00043384	12992.72	30845.06	43837.78	**2191.89**

Notes:
E = 12.46 *S*P*M/T = lbs of emissions/ 1000 gal loaded
T = Temp (Rankine) =530
M = Mol. Wt (lb/lb-mole)
P = Vapor pressure (psa)
S = Saturation factor (.6 for submerged fill)
Mixing emissions
E = M * Kx * A * P * 3600 * H/ (R*T)
E = emission in pounds
T = Temp (Rankine) = 580
M = Mol. Wt (lb/lb-mole)
P = Vapor pressure (psa)
A = Area of tank (35 sf)
H = batch time (hrs)
Kx = gas phase mass transfer coeff.
Kx = 0.00438* (U^0.78)(18/M)^1/3
U = wind speed = 0.1 mph
R = Universal gas constant = 10.73 VP and MW estimated with worst case hexane.

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Time in Tank for each Batch: process time
Batch Process Time: 10
Down time between batches: 0.75

Gallons per Batch: 4800 for good recovered stream plus 300 gallons of prep material.
 # Batches / year: 2.23*365=813
Batch = fill 5 minutes at 60 g/min + run at 20 gal/min
Total Throughput: 2.23 batches * 2400 gallons / batch*365 =1953480**gallons /yr**
2 thin films running to same tank -1953480*2=3906960
plus 300 gal/batch*2.29 batches *365 =250755
most still bottoms are 40% solids. 3906960* .60 = solvent amount =2344176
4400G

Total pounds		47,769.787
% VOC		80.00%
Total Pounds VOC		38215.8299
% HAP		80.00%
Total Pounds HAP		38215.83
PTE before control	23.88	ton/yr
After control	1.19	tons/yr

TSD Appendix A: Emissions Calculations
Fugitive Emissions

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Fugitive Emissions - Valves, Fittings, Pump Seals, Etc.

Component Type	Unit Operation	No. of Units	Emission Factor (lbs/unit)*	Annual Operating Hours (hrs/yr)	VOC Emissions (lbs/yr)	VOC Emissions (tons/yr)
Valves	ALL	336	0.00061	8,760	1795	0.898
Pump Seals	ALL	22	0.00432	8,760	833	0.416
Flanges	ALL	120	0.00003	8,760	31.5	0.016
Unions	ALL	144	0.00003	8,760	37.8	0.019
Sampling Connections	ALL	20	0.0025	8,760	438	0.219
				Totals	**3135**	**1.57**

METHODOLOGY

*Emission Factor based on source engineering estimate.
VOC Emissions (lbs/yr) = No. of Units * Emission Factor (lbs/unit) * Annual Operating Hours (hrs/yr)
VOC Emissions (tons/yr) = VOC Emissions (lbs/yr) / 2,000 lbs/ton

TSD Appendix A: Emissions Calculations
Natural Gas Combustion Only

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Equipment	Heat Input Capacity MMBtu/hr
Tube Boiler BO 1	25.1
Insignificant Tube Boiler	8.40
Total	33.51

HHV mmBtu/mmscf	Potential Throughput MMCF/yr
1020	287.8

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.3	1.1	1.1	0.1	14.4	0.8	12.1

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	3.022E-04	1.727E-04	1.079E-02	2.590E-01	4.892E-04	**2.708E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	7.195E-05	1.583E-04	2.015E-04	5.468E-05	3.022E-04	**7.885E-04**

Total HAPs	**2.716E-01**
Worst HAP	**2.590E-01**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

TSD Appendix A: Emission Calculations
DP 1

Company Name: **Reclaimed Energy, Division of Superior Oil Company, Inc.**
Address City IN Zip: **1500 Western Avenue, Connersville, Indiana 47331**
Significant permit modification: **041-36969-00015**
Reviewer: **Nicholas Eilerman**

									PTE				
DP1/Process	time per run	gal / hour	hr / year*	gal	lb/gal (ave.)	lb	ton	EF lb/ton **	lb emissions	Tons/yr before control	control***	emission after control	tons/yr after control
run	5 hour	600	7300	4380000	7	30660000	15330	3.3	50589	25.2945	95%	2529.45	1.264725
fill	1 hour	3000	1460	4380000	7	30660000	15330	0.72	11037.6	5.5188	95%	551.88	0.27594
								Total	61626.6	30.8133		3081.33	1.540665

									Actual				
DP1/Process	time per run	gal / hour	hr / year*	gal	lb/gal (ave.)	lb	ton	EF lb/ton **	lb emissions	Tons/yr before control	control***	emission after control	tons/yr after control
run	9 hours	350	6552	2293200	7	16052400	8026.2	3.3	26486.46	13.24323	95%	1324.323	0.6621615
fill	1 hour	3000	936	2808000	7	19656000	9828	0.72	7076.16	3.53808	95%	353.808	0.176904
								Total	33562.62	16.78131		1678.131	0.8390655

METHODOLOGY

*(PTE is based on running the unit continuously 7 days a week at maximum overhead. The Actual emission is based on running the unit continuously 6 days a week which is still **very** conservative)

**(emissions factors were taken from AP-42 chapter 4.7 Waste Solvent Reclamation. The factor for the process is the "condenser vent" factor and the one for filling si the "loading" factor.)

***(control efficiency from the catalytic thermal oxidier. The emissions from filling and processing would be routed through the unit.)

TSD Appendix A: Emissions Calculations
HAP Emissions DP 1

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

HAP Emissions from Recovery Processes (Col 1, Col 2, DP 1, TF 1, and TF 2)

Step 1 - Unit Operation Start Up Emissions

Production System No.	**DP 1**
Material Processed	Methylene Chloride
System at Rest Air Volume (cf)	589
System at Rest Air Volume (gal)	4406
Material Molecular Weight (g/mol)	85
Material Vapor Pressure (psi)	6.88
Condensor Recovery Efficiency (%)	97
Annual Volume Processed (gal/yr)	1,752,000
Batch Volume Processed (gal)	3,000
Uncontrolled HAP Emissions (lbs/yr)	1066
Uncontrolled HAP Emissions (tons/yr)	**0.533**
Control Effciency (%)	98.0%
Controlled HAP Emissions (lbs/yr)	21.3
Controlled HAP Emissions (tons/yr)	**0.011**

Step 2 - Vent Emissions after Start Up

Production System No.	**EU-DP 1**	**Total**
Material Processed	Methylene Chloride	
Estimated Vent Flow Rate (cfm)	0.525	
Material Molecular Weight	85	
Material Vapor Pressre (psi)	11	
Exhaust Temperature (deg F)	90	
Production Rate (gal/hr)	200	
Annual Operation (hrs/yr)	8,760	**8,760**
Uncontrolled HAP Emissions (lbs/yr)	43734	**43734**
Uncontrolled HAP Emissions (tons/yr)	**21.9**	**22**
Control Efficiency (%)	98.0%	
Controlled HAP Emissions (lbs/yr)	875	**875**
Controlled HAP Emissions (tons/yr)	**0.437**	**0.44**

Total HAP Emissions from each Step

Production System No.	**DP 1**
Uncontrolled HAP Emissions (lbs/yr)	44799
Uncontrolled HAP Emissions (tons/yr)	22.4
Controlled HAP Emissions (lbs/yr)	896
Controlled HAP Emissions (tons/yr)	0.448

METHODOLOGY

Step 1 - Start Up Emissions
Uncontrolled HAP Emissions (lbs/yr) = (System at rest air volume/7.48 gal/cf) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/T+460)
where:
359 = volume in cubic feet occupied by 1 mole of an ideal gas at standard temperature at pressure and T = 68 degrees F

Step 2 - Vent Emissions after Startup
Uncontrolled HAP emissions (lbs/yr) = (Vent flow rate * 60 min/hr) * (Material Vapor Pressure/14.7) * (Molecular Weight/359) * (492/Exhaust Temp +460) * annual operati

For Both Steps:
Uncontrolled HAP Emissions (tons/yr) = Uncontrolled HAP Emissions (lbs/yr) / 2,000 lbs/ton
Controlled HAP Emissions (lbs/yr) = Uncontrolled HAP Emissions (tons/yr) * (1-Control Efficiency)
Controlled HAP Emissions (tons/yr) = Controlled HAP Emissions (lbs/yr) / 2,000 lbs/ton

TSD Appendix A: Emissions Calculation
GM 1

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Chemical Mixturers	Wt %	Molecular Weight	Vapor Pressure	Specific Gravity	Density	Mole Number	Mole Percent	Mixture MW	Mixture Vp
mineral Spirits	50	141	0.12	0.788	6.56	1.83307801	0.72522529	267.405242	0.10831205
Aromatic 100	7	123	0.15	0.87	7.244	0.35866634	0.14190007		
soybean oil	10	300	0	0.92	7.66	0.23490667	0.09293672		
gilsonite powder	33	3000	0	1.05	8.74	0.100947	0.03993792		
Total:	100				7.551	2.52759802	1.00		

Mixing Emissions

Output Product Name	Qty (lb)	Sp. Gr.	Qty (gal)	Time (min)	MW	Vp	Kx	Loading Emm (lbs)	Blending Emissions	Total Emissions (lbs.)	% VOC	VOC PTE
Gilsonite	14,597,951	0.87	2,014,799.955	219,000	267.40	0.11	0.000298367	1,723.3493	6400.346	**8,123.70**	57%	4630.5064

Notes:
E = 12.46 *S*P*M/T = pounds of emissions per 1000 gallons loaded
T = Temp (Rankine) = 610
M = Mol. Wt (lb/lb-mole)
P = Vapor pressure (psa)
S = Saturation factor (1.45 for splash loading - very conservative)

Mixing emissions
E = M * Kx * A * P * 3600 * H/ (R*T)
E = emission in pounds
T = Temp (Rankine) = 610
M = Mol. Wt (lb/lb-mole)
P = Vapor pressure (psa)
A = Area of tank (sf)
H = batch time (hrs)
Kx = gas phase mass transfer coeff.
Kx = 0.00438* (U^0.78)(18/M)^1/3
U = wind speed = 0.1 mph
R = Universal gas constant = 10.73

Time in Tank for each Batch: 10 hours
Batch Process Time: 5 hours
Down time between blends: 2-3 hours clean up and prep 2 hours to load it. 2-3 hour quality and reblend
Gallons per Batch: 2,700
 # Batches / year: 365 days / 2 batch per day = 730 batches per year

Total Throughput: 1,460 hours / ye 730 batches * 2760 gallons / batch = **2014800 gallons /yr**

Batch Process Time: 730 batches * 300 = 219000 **minutes**

Total pounds	8,123.000
Total Pounds VOC/Yr	4,630.00
Total pounds VOC/day	12.6849
Total Pounds VOC tons/Yr	2.315

PTE Pounds per day < 15 pounds = insignificant

TSD Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip) fuel	1.0	2.0	2.0	41.0	82.0	196	0.037	0.1	27.1
Vehicle (entering plant) (one-way trip) receipts	4.0	8.0	32.0	41.0	1312.0	196	0.037	1.2	433.6
empty drums (trucks and boxes)	0.4	0.7	0.3	41.0	10.5	196	0.037	0.0	3.5
empty drums (truck only)	0.6	1.4	0.9	9.0	7.8	196	0.037	0.0	11.7
Vehicle coming (box trucks)	1.5	3.0	4.5	41.0	184.5	20	0.004	0.0	6.2
vehicle leaving plant (truck and trailer)	2.0	4.0	8.0	41.0	328.0	20	0.004	0.0	11.1
Vehicle (leaving plant) (truckonly)	2.0	4.0	8.0	9.0	72.0	249	0.047	0.4	137.7
		Totals	**55.6**		**1996.8**			**1.7**	**630.8**

Average Vehicle Weight Per Trip = 35.9 tons/trip
Average Miles Per Trip = 0.03 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	35.9	35.9	35.9	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	3.354	0.671	0.1646	lb/mile
Mitigated Emission Factor, Eext =	3.067	0.613	0.1506	lb/mile
Dust Control Efficiency =	0%	0%	0%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip) fuel	0.05	0.01	0.00	0.04	0.01	0.00	0.04	0.01	0.00
Vehicle (entering plant) (one-way trip) receipts	0.73	0.15	0.04	0.66	0.13	0.03	0.66	0.13	0.03
empty drums (trucks and boxes)	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
empty drums (truck only)	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00
Vehicle coming (box trucks)	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Vehicle (leaving plant) (truckonly)	0.23	0.05	0.01	0.21	0.04	0.01	0.21	0.04	0.01
Totals	**1.04**	**0.21**	**0.05**	**0.95**	**0.19**	**0.05**	**0.95**	**0.19**	**0.05**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

TSD Appendix A: Emissions Calculations
RTO

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

Equipment	Heat Input Capacity MMBtu/hr
regenerative thermal oxidizer (RTO	2.75

HHV mmBtu / mmscf	Potential Throughput MMCF/yr
1020	23.6

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.02	0.090	0.090	0.01	1.2	0.065	0.992

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	2.480E-05	1.417E-05	8.857E-04	2.126E-02	4.015E-05	**2.222E-02**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	5.904E-06	1.299E-05	1.653E-05	4.487E-06	2.480E-05	**6.471E-05**
					Total HAPs	**2.229E-02**
					Worst HAP	**2.126E-02**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	1,417	0.0	0.0
Summed Potential Emissions in tons/yr	1,417		
CO2e Total in tons/yr	1,426		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential

TSD Appendix A: Emissions Calculations
new thin film evaporator No. 2 (TF 2)

Company Name: Reclaimed Energy, Division of Superior Oil Company, Inc.
Address City IN Zip: 1500 Western Avenue, Connersville, Indiana 47331
Significant permit modification: 041-36969-00015
Reviewer: Nicholas Eilerman

vent emissions

waste solvent throughput (gallons/24 hr)	waste solvent throughput (gallons/hr)	maximum % of solvent reclaimed from the waste solvent [1]	amount of solvent reclaimed (gallons/hr)	density of reclaimed solvent (lb/gallon)	amount of solvent reclaimed (tons/hr)	amount of solvent reclaimed (tons/yr)	amount of solvent reclaimed (gallons/yr)	uncontrolled emission factor (lb VOC/ton of reclaimed solvent)	VOC emission (lb/hr)	Potential VOC Emissions (tons/yr)	Potential combined HAPs Emissions (tons/yr)	Potential single HAP Emissions (tons/yr)
14400.00	600.00	99%	594.00	7.50	2.23	19512.90	5,203,440	3.30	7.35	32.20	32.20	32.20

spillage emissions

waste solvent throughput (gallons/24 hr)	waste solvent throughput (gallons/hr)	maximum % of solvent reclaimed from the waste solvent [1]	amount of solvent reclaimed (gallons/hr)	density of reclaimed solvent (lb/gallon)	amount of solvent reclaimed (tons/hr)	amount of solvent reclaimed (tons/yr)	amount of solvent reclaimed (gallons/yr)	uncontrolled emission factor (lb VOC/ton of reclaimed solvent)	VOC emission (lb/hr)	Potential VOC Emissions (tons/yr)	Potential combined HAPs Emissions (tons/yr)	Potential single HAP Emissions (tons/yr)
14400.00	600.00	99%	594.00	7.50	2.23	19512.90	5,203,440	0.20	0.45	1.95	1.95	1.95

Loading emissions

-	Potential VOC Emissions (tons/yr)	Potential combined HAPs Emissions (tons/yr)	Potential single HAP Emissions (tons/yr)
-	3.94	3.94	3.94
Total	**38.09**	**38.09**	**38.09**

Methodology
Vent and spillage emission factors are from AP 42 Table 4.7-1 (Waste Solvent Reclamation). Loading emissions in tons per year are provided by the source. The source calculated this loading emissions from Tanks Software.
[1] From AP 42 4.17.1 (Waste Solvent Reclamation): The amount of solvent recovered from the waste varies from about 40 to 99 percent, depending on the extent and characterization of the contamination and on the recovery process employed.
Conservatively it is assumed that all VOC are single HAP and combined HAPs.
amount of solvent reclaimed (gallons/hr) = waste solvent throughput (gallons/hr) x maximum % of solvent reclaimed from the waste solvent
amount of solvent reclaimed (tons/hr) = amount of solvent reclaimed (gallons/hr) x density of reclaimed solvent (lb/gallon) x 1/2000 (ton/lb)
amount of solvent reclaimed (tons/yr) = amount of solvent reclaimed (tons/hr) x 8760 (hrs/yr)
VOC emission (lb/hr) = amount of solvent reclaimed (tons/hr) x emission factor (lb VOC/ton of reclaimed solvent)
Potential VOC Emissions (tons/yr) = VOC emission (lb/hr) x 8760 (hrs/yr) / 2000 (lbs/ton)
Total emissions (tons/yr) = vent emissions (tons/yr) + spillage emissions (tons/yr) + loading emissions (tons/yr)

Limited emissions to avoid 326 IAC 8-1-6 BACT

	limited amount of solvent reclaimed (gallons/yr)	density of reclaimed solvent (lb/gallon)	Limited amount of solvent reclaimed (tons/yr)	uncontrolled emission factor (lb VOC/ton of reclaimed solvent)	Limited VOC Emissions (tons/yr)
vent emissions	3,208,000	7.50	12030.00	3.30	19.8
spillage emissions	3,208,000	7.50	12030.00	0.20	1.2
Loading emissions					3.94
				Total Limited Emissions	**24.99**

Methodology
Limited amount of solvent reclaimed (gallons/yr) value is proposed by the source.
Limited amount of solvent reclaimed (tons/yr) = limited amount of solvent reclaimed (gallons/yr) x density of reclaimed solvent (lb/gallon) / 2000 (lbs/ton)
Limited VOC Emissions (tons/yr) =Limited amount of solvent reclaimed (tons/yr) x uncontrolled emission factor (lb VOC/ton of reclaimed solvent) / 2000 (lbs/ton)
Total limited emissions (tons/yr) = limited vent emissions (tons/yr) + limited spillage emissions (tons/yr) + loading emissions (tons/yr)

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

September 1, 2016

Ms. Kellee Cobb
EHS Manager
Reclaimed Energy, Division of Superior Oil Co., Inc.
1500 Western Avenue
Connersville, Indiana 47331

Re: Public Notice
Reclaimed Energy. Division of Superior Oil Co., Inc.
Permit Level: Significant Permit Modification
Permit Number: 041-36969-00015

Dear Ms. Cobb:

Enclosed is a copy of your draft Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the News Examiner in Connersville, Indiana publish the abbreviated version of the public notice no later than September 4, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Fayette County Public Library, 828 Grand Avenue in Connersville, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Nicholas Eilerman, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-5373 or dial (317) 234-5373.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016

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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

September 1, 2016

News Examiner
P. O. Box 287
Connersville, Indiana 47331

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Reclaimed Energy Division of Superior Oil Co., Inc., Fayette County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than September 4, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vicki Biddle at 800-451-6027 and ask for extension 3-6867 or dial 317-233-6867.

Sincerely,

Vicki Biddle

Vicki Biddle
Permit Branch
Office of Air Quality

Permit Level: Title V – Significant Permit Modification
Permit Number: 041-36969-00015

Enclosure

PN Newspaper.dot 2/17/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

To: Fayette County Public Library

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Reclaimed Energy, Division of Superior Oil Co., Inc.
Permit Number: 041-36969-00015

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/16/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

September 1, 2016
Reclaimed Energy, Division of Superior Oil, Co., Inc.
041-36969-00015

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice 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. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

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Carol S. Comer
Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

September 1, 2016

A 30-day public comment period has been initiated for:

Permit Number: **041-36969-00015**
Applicant Name: **Reclaimed Energy, Division of Superior Oil Co., Inc.**
Location: **Connersville, Fayette County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Affected States Notification.dot 2/17/2016

Mail Code 61-53

IDEM Staff	VBIDDLE 9/1/2016 Reclaimed Energy Division, Superior Oil Company, Inc. 041-36969-00015 DRAFT		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**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Kellee R Cobb Reclaimed Energy Division, Superior Oil Company, I 1500 Western Avenue Connersville IN 47331 (Source CAATS)									
2		Jay Baker COO Reclaimed Energy Division, Superior Oil Company, I 1402 N Captiol Avenue Indianapolis IN 46202 *(RO CAATS)*									
3		Connersville City Council and Mayors Office 500 Central Avenue Connersville IN 47331 *(Local Official)*									
4		Fayette County Health Department 401 N Central Ave Ste 8 Connersville IN 47331-1901 *(Health Department)*									
5		Fayette County Public Library 828 N Grand Ave Connersville IN 47331-2098 *(Library)*									
6		Fayette County Commissioners 401 Central Ave Connersville IN 47331 *(Local Official)*									
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