



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 7, 2010

RE: Dover Chemical Company – Hammond Works / 089 - 29495 – 00227

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Significant Source Modification to a Part 70 Source Office or Air Quality

Dover Chemical Corporation – Hammond Works
3000 Sheffield Avenue,
Hammond, IN 46327

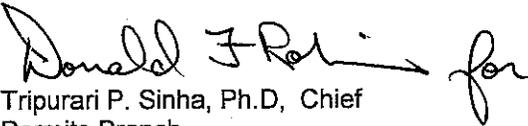
(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

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.

This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: 089-29495-00227

Issued by:


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

Issuance Date:

December 7, 2010

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- 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)]
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1), (3) and (13)][326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
- B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]
- B.15 (Reserved)
- B.16 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]
- B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
- B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.19 Permit Revision under Economic Incentives and other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12(b)(2)]
- B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
- B.21 Source Modification Requirement [326 IAC 2-7-10.5][326 IAC 2-2-2][326 IAC 2-3-2]
- B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
- B.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)][326 IAC 2-7-10.5]
- B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]

C SOURCE OPERATION CONDITIONS

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

- C.1 Opacity [326 IAC 5-1]
- C.2 Open Burning [326 IAC 4-1][IC 13-17-9]
- C.3 Incineration [326 IAC 4-2][326 IAC 9-1-2]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
- C.5 Stack Height [326 IAC 1-7]
- C.6 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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)]
- C.10 (Reserved)

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

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

- C.12 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]
- C.13 Risk Management Plan [326 IAC 2-7-5(12)][40 CFR 68]
- C.14 Response to Excursions or Exceedances [326 IAC 2-7-5][326 IAC 2-7-6]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

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

- C.16 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]
- C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6][326 IAC 2-3][326 IAC 2-2]
- C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-3][326 IAC 2-2]

Stratospheric Ozone Protection

- C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - 12.55, 20.92 and 20 MMBtu Natural Gas Fired Boilers

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

- D.1.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2][326 IAC 6-2-4]

D.2 FACILITY OPERATION CONDITIONS - Chlorination Process

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

- D.2.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2][326 IAC 6.8-1-5]
- D.2.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]
- D.2.3 Preventative Maintenance Plan

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

- D.2.4 Scrubber Operation Requirements
- D.2.5 Hydrochloric Acid (HCl) and Chlorine (Cl₂)

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

- D.2.6 Parametric Monitoring

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

- D.2.7 Record Keeping Requirements

D.3 FACILITY OPERATION CONDITIONS - Sulfurization Process

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

- D.3.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2][326 IAC 6.8-1-5]
- D.3.2 PSD Minor Limit [326 IAC 2-2]
- D.3.3 Offset Minor Limit [326 IAC 2-3]
- D.3.4 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]
- D.3.5 Preventative Maintenance Plan

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

- D.3.6 H₂S Emissions
- D.3.7 VOC Emissions

Testing and Monitoring Requirement [326 IAC 2-7-6 (1)][326 IAC 2-7-5 (1)]

- D.3.8 Hydrogen Sulfide (H₂S) and VOC [326 IAC 2-7-10.5]
- D.3.9 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

Monitoring Requirements

D.3.10 Parametric Monitoring

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

D.3.11 Record Keeping Requirements

D.3.12 Reporting Requirements

D.4 FACILITY OPERATION CONDITIONS - Hi-Temp Process

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

D.4.1 Particulate Emissions Limitations, Work Practices and Control Technologies-
Manufacturing Processes [326 IAC 6-3-2]

D.4.2 Preventative Maintenance Plan

D.5 FACILITY OPERATION CONDITIONS - Fuel Additive Process

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

D.5.1 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

D.5.2 Record Keeping Requirements

D.5.3 Preventative Maintenance Plan

D.6 FACILITY OPERATION CONDITIONS - Miscellaneous Process

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

D.6.1 Particulate Emissions Limitations; fuel combustion steam generators, asphalt concrete
plant, grain elevators, foundries, mineral aggregate operations; modification by
commissioner [326 IAC 6.8-1-2]

**D.7 FACILITY OPERATION CONDITIONS - Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] VOC Storage Tanks**

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

D.7.1 Volatile Organic Liquid Storage Vessels [326 IAC 12][40 CFR 60, Part Kb]

D.7.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

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

D.7.3 Record Keeping Requirements

**D.8 FACILITY OPERATION CONDITIONS - Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] 5.7 MMBtu/hr Boiler**

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

D.8.1 Particulate Matter Limitation (PM₁₀) [326 IAC 6.8-2][326 IAC 6-2-4]

E.1 FACILITY OPERATION CONDITIONS – NESHAP Minor Limits and Requirements

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

E.1.1 NESHAP Minor Limit [40 CFR Part 63, Subpart A][40 CFR Part 63, Subpart NNNNN]
[326 IAC 20-1]

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

E.1.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

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

E.1.3 Record Keeping Requirements

E.1.4 Reporting Requirements

Certification

Emergency Occurrence Report

Part 70 Quarterly Report - Sulfur Usage Report

Part 70 Quarterly Report - Sulfurization Products

Part 70 Quarterly Report - Temporary Operations and Experimental Trials - Total HAP

Part 70 Quarterly Report - Temporary Operations and Experimental Trials - Cl₂ and HCl

Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary chlorinated paraffin manufacturing plant.

Source Address:	3000 Sheffield Avenue, Hammond, IN 46327
Mailing Address:	3000 Sheffield Avenue, Hammond, IN 46327
SIC Code:	2899
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone Nonattainment for PM _{2.5} Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules Minor Source, under Nonattainment NSR for PM _{2.5} 1 of 28 Source Categories Minor Source, Section 112 of the Clean Air Act

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

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

SECTION D.1

(a) Group of Boilers

- (1) One (1) Cleaver-Brooks natural gas fired boiler, Model CB-300HP, identified as B-4, constructed in 1974, rated at 12.55 MMBtu per hour, and exhausting at one (1) stack, identified as GB-3401.
- (2) One (1) Cleaver-Brooks natural gas fired boiler, Model CB-200-500, identified as B-5, constructed in 1980, rated at 20.92 MMBtu per hour, and exhausting at one (1) stack, identified as GB-3402.
- (3) One (1) Superior–Mohawk natural gas fired boiler, identified as B-6, constructed in 1988, rated at 20 MMBtu per hour, and exhausting at one (1) stack, identified as GB-3403.

SECTION D.2

Chlorination system

with a nominal capacity of 3,000 pounds per hour of chlorine feed to produce short to long chain chlorination paraffins, olefins, waxes, polybutene, and 4,821 pounds per hour of muriatic acid. The chlorination system consists of the following systems:

(b) The system consisting of:

- (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007

(constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;

- (2) Four (4) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;
- (3) One (1) sulfur monochloride tank, identified as TS-1058, constructed in 1981, with a maximum capacity of 5,470 gallons;
- (4) One (1) acid tower condensate neutralization tank, identified as TP-2030, constructed before 1976, with a maximum capacity of 500 gallons;
- (5) Two (2) chlorine railcar track spots, identified as RC-0101 and RC-0201, constructed before 1976, with a maximum capacity of 1 railcar (containing at most 180,600 pounds) each;
- (6) One (1) acid tower, identified as CB-2060, constructed before 1976, with a maximum capacity of 4,821 lb/hr muriatic acid;
- (7) One (1) tower product acid tank, identified as TP-2033, constructed before 1976, with a maximum capacity of 560-gallons;
- (8) One (1) tower water feed tank, identified as TP-2060 (constructed in 1996), with a maximum capacity of 560-gallons; and
- (9) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined.

all controlled by seven (7) scrubbers, identified as TP-2061 (constructed before 1976), TP-2062 (constructed before 1976), TP-2063 (constructed before 1976), TP-2064 (constructed before 1976), TP-2065 (constructed in 1977), TP-2066 (constructed in 1977), and TP-2067 (constructed in 1995), and exhausting at seven (7) stacks, identified as Stacks TP-2061 to 2067.

(c) The system consisting of:

- (1) Three (3) muriatic acid tanks, identified as TS-1090 (constructed in 1979), TS-1091 (constructed in 1980), and TS-1093 (constructed in 2000), with a maximum capacity of 16,000, 14,900 and 16,000 gallons, respectively;
- (2) Two (2) hypochlorite reduction tanks, identified as TP-3494, and TP-3495 (constructed in 1993), with a maximum capacity of 6,250 gallons each;
- (3) One (1) muriatic acid tank truck loading station, constructed in 1979, with a maximum capacity of 1 truck;

controlled by one (1) caustic scrubber identified as TP-1099 constructed in 1980 exhausting at one (1) stack, identified as Stack TP-1099.

(d) The system consisting of:

- (1) One (1) chlorinated product tank, identified as TS-2041, constructed before 1976, with a maximum capacity of 4,000 gallons;
- (2) Two (2) chlorinated product tanks, identified as TS-2043, and TS-2044, constructed before 1976, with a maximum capacity of 4,100 gallons each; and
- (3) One (1) chlorinated product-drumming tank, identified as TS-2012, constructed in

1978, with a maximum capacity of 1,500 gallons.

SECTION D.3 Sulfurization system

with a nominal capacity of 7000 pounds per hour of sulfurized products consisting of the following equipment:

- (e) The system consisting of:
- (1) Three (3) sulfurization reactors, identified as TR-2120, TR-2121, and TR-2123, constructed before 1976, with maximum capacity of 3,700, 3,700, and 7,500 gallons, respectively, and one (1) sulfurization reactor. Identified as TR-2128, constructed in 2010, with a maximum capacity of 7,500 gallons controlled by two (2) caustic scrubbers operating in series, identified as TP-2162 and TP-2163, followed by an activated carbon system for odor management and exhausting at Stack TP-2163. Three (3) integral reflux condensers associated with sulfurization reactors TR-2120, TR-2121, and TR-2128. Two(2) quench tanks, identified as TP-2121a and TP-2121B, constructed in 1993 and 2010, with maximum capacities of 850 gallons and 1,200 gallons, respectively, which contain olefins and heavy oil, and which function as an emergency quench for reactor malfunctions.
 - (2) Five (5) blowing tanks, identified as TP-2150 (constructed in 1977), TP-2151 (constructed in 1977), TP-2152 (constructed in 1977), TP-2153 (constructed in 1977), and TP-2154 (constructed in 1997), with maximum capacity of 11,000, 9,650, 11,500, 4,000, and 7,600 gallons, respectively, venting to a blowing tank knockout tank identified as TP-2159 (constructed prior to 1976), controlled by two (2) caustic scrubbers, identified as TP-2162 and TP-2163 and exhausting at Stack TP-2163.
 - (3) One (1) knockout storage tank, identified as TS-2164, constructed in 1976, with a maximum capacity of 1,500 gallons, exhausted to a containment scrubber, identified as TP-2167, constructed in 1995, and exhausting at Stack TP-2167.
 - (4) One (1) scrubber liquor storage tank, identified as TS-1028, constructed in 1980, with a maximum capacity of 11,075 gallons.
 - (5) Two (2) molten sulfur storage tanks, identified as TS-2190 and TP-2190, constructed in 1976.
 - (6) One (1) filter feed tank, maximum capacity of 3,000 gallons, identified as TP-2207, constructed prior to 1976.

SECTION D.4 Hi-Temp System

with a maximum rated capacity of 4,200 pounds per hour of Hi-Temp products consisting of the following equipment:

- (f) The system consisting of:
- (1) One (1) reactor, identified as TR-2620, constructed in 1989, with a maximum capacity of 4,000 gallons;
 - (2) Two (2) recovered methanol tanks, identified as TS-2602 and TS-2603, constructed in 1989, with maximum capacity of 2,500, and 4,000 gallons, respectively;
 - (3) One (1) sludge tank, identified as TP-2604, constructed in 1989, with a maximum capacity of 750 gallons, equipped with a sludge drumming operation followed by an activated carbon filter for odor management;

- (4) One (1) scrubber liquor tank, identified as TS-2610, constructed in 2001, with a maximum capacity of 10,000 gallons; and
- (5) One (1) intermediate holding tank, identified as TP-2601, constructed in 1989, with a maximum capacity of 4,550 gallons;

all controlled by two (2) caustic scrubbers identified as TP-2624 and TP-2626, constructed in 1989; and one flare, identified as GB-2627, constructed in 1990, in series, and exhausting at one (1) stack, identified as Stack GB-2627.

- (g) One (1) scrubber liquor truck loading station, constructed in 1989, controlled by a carbon drum, identified as TF-2610 constructed in 2001.

(h) The system consisting of:

- (1) One (1) reactor, identified as TP-2553, constructed in 1993, with a maximum capacity of 2,100 gallons.
- (2) One (1) reactor, identified as TR-2541, constructed in 2005, with a maximum capacity of 3,500 gallons.
- (3) Three (3) wash water tanks, identified as TP-2556, TP-2557, and TP-2558, constructed in 1996, each with a maximum capacity of 700 gallons.

All controlled by one (1) caustic scrubber, identified as TP-2589, exhausting at Stack-2589.

- (i) One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.
- (j) One (1) PIB heat up tank, identified as TP-2542, constructed in 2010, with a maximum capacity of 5,000 gallons.
- (k) One (1) overflow tank, identified as TP-2537, permitted in 2010, with a maximum capacity of 2,000 gallons.
- (l) One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons, equipped with an integral multi-stage steam educator and condenser system followed by a carbon drum and one (1) emergency overflow tank, identified as TP-2760, permitted in 2010, with a maximum capacity of 1,300 gallons, and one (1) reactor, identified as TR-2016, constructed in 1990, with a maximum capacity of 4,000 gallons, with emissions controlled by a scrubber, TP-2072.

(m) The system consisting of:

- (1) One (1) filter feed tank, identified as TP-2720, constructed in 1995, with maximum capacity of 5,000 gallons.
- (2) One (1) filter, identified at GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet per filter cake.
- (3) One (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet per filter cake.
- (4) One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.
- (5) One (1) flush tank, identified as TP-2726, constructed in 2010, with a maximum capacity of 1,300 gallons.

All controlled by a carbon drum, identified as TF-2728, exhausting to Stack TF-2728.

- (n) Two (2) filtrate tanks, identified as TP-2730 and TP-2732, constructed in 1995 and 2010, respectively, with a maximum capacity of 5,000 gallons each.
- (o) Two (2) neutralization storage tanks, identified as TP-2538 and TP-2539, permitted in 2010, with a maximum capacity of 12,500 gallons, each.
- (p) One (1) amine storage tank, identified as TS-2391, permitted in 2010, with a maximum capacity of 7,950 gallons.

SECTION D.5 Fuel Additive system

with a maximum rated capacity of 12,000 pounds per hour of fuel additives (prior to blending) consisting of the following equipment:

- (s) The system consisting of:
 - (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;
 - (2) Four (4) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;
 - (3) One (1) reactor, identified as TR-2016 (constructed in 1990), which discharges process water (condensate) to the condenser or the bypass system with a maximum capacity of 4,000 gallons;
 - (4) One (1) EDA recycle tank, identified as TP-2052 (constructed in 1985), with a maximum capacity of 1,700 gallons;

controlled by a scrubber identified as TP-2072 (constructed in 1985), and exhausting at a stack identified as Stack TP-2072.

- (t) One (1) virgin EDA tank, identified as TS-1027, constructed in 1985, maximum capacity of 14,930 gallons, controlled by a carbon adsorption drum identified as TF-1027, and exhausting at stack identified as Stack TF-1027.
- (u) One (1) continuous wash system constructed in 1985 consisting of tanks TP-2339, TP-2328, TP-2334, TP-2333, TP-2331, TP-2330, TP-2340, TP-2349, TP-2348, one (1) 300 gallon feed tank identified as TP-2329, one (1) butanol recovery column identified as CS-2329, and one stripping column identified as CD-2319, controlled by one (1) vent condenser identified as XT-2313 and exhausting to stack XT-2313.
- (v) One (1) continuous wash system, constructed in 1990, consisting of tanks TP-2350, TP-2359, TP-2353, TP-2354, TP-2351, TP-2352, TP-2355, TP-2356, TP-2357, one (1) butanol water feed tank identified as TP-2358, one (1) butanol recovery column identified as CS-2368, and one stripping column identified as CD-2350, controlled by one (1) vent condenser identified as XT-2350 and exhausting to stack XT-2350.
- (w) Four (4) product rundown tanks, identified as TP-1035, TP-1036 (both constructed in 1985), TP-2360, and TP-2361 (both constructed in 1990), maximum capacity of 6,800 gallons each.
- (x) Three (3) fuel additive blending tanks, identified as TP-1030, TP-1031, and TP-1032, all

constructed in 1985, with maximum capacities of 11,740, 15,220, and 11,740 gallons, respectively.

SECTION D.6 Miscellaneous system

with a maximum rated capacity of 3,000 pounds per hour consisting of the following equipment:

- (y) Five (5) reactors, identified as TR-2224 (constructed in 1980), TR-2225 (constructed before 1976), TR-2226 (constructed before 1976), TR-2227 (constructed before 1976), and TR-2322 (constructed in 1984), maximum capacity of 5,500, 2,000, 7,000, 400, 2000 gallons respectively; controlled by two (2) wet scrubbers, identified as PE-2228, and TP-2332, and exhausting at stacks identified as Stack PE-2228, and Stack TP-2332.
- (z) One (1) reactor, identified as TR-2329 (constructed in 1986), maximum capacity of 1,500, gallons.

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):

SECTION D.7 VOC STORAGE TANKS

- (aa) Storage tanks emitting less than one (1) ton per year collectively of a combination of HAPs and less than fifteen (15) pounds per day of VOC. [326 IAC 12, and 40 CFR 60.112b(a)]
 - (1) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1001, constructed in 1997.
 - (2) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1002, constructed in 1997.
 - (3) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1003, constructed in 1993.
 - (4) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1004, constructed in 1978.
 - (5) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1005, constructed in 1978.
 - (6) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1006, constructed in 1978.
 - (7) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1007, constructed in 1978.
 - (8) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1008, constructed in 1978.
 - (9) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1009, constructed in 1978.
 - (10) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1010, constructed in 1978.
 - (11) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1011, constructed in 1978.

- (12) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1012, constructed in 1978.
- (13) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1013, constructed in 1978.
- (14) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1014, constructed in 1978.
- (15) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1015, constructed in 1987.
- (16) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1016, constructed in 1978.
- (17) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1017, constructed in 1978.
- (18) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1018, constructed in 1978.
- (19) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1019, constructed in 1996.
- (20) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1020, constructed in 1997.
- (21) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1021, constructed in 1997.
- (22) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1022, constructed in 1996.
- (23) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1023, constructed in 1996.
- (24) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1024, constructed in 1997.
- (25) One (1) storage tank, maximum capacity of 28,760 gallons, identified as TS-1026, constructed in 1980.
- (26) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1033, constructed in 1986.
- (27) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1039, constructed in 1987.
- (28) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1040, constructed in 1987.
- (29) One (1) storage tank, maximum capacity of 15,540 gallons, identified as TS-1042, constructed in 1989.
- (30) One (1) storage or blend tank, maximum capacity of 14,900 gallons, identified as TS-1043, constructed in 1990.
- (31) One (1) wax storage tank, maximum capacity of 20,390 gallons, identified as TS-1056, constructed in 1978.

- (32) One (1) storage tank, maximum capacity of 20,390 gallons, identified as TS-1057, constructed in 1978.
- (33) One (1) storage tank, maximum capacity of 4,010 gallons, identified as TS-1081, constructed in 1989.
- (34) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1082, constructed in 1989.
- (35) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2160, constructed before 1976.
- (36) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2163, constructed before 1976.
- (37) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2168, constructed before 1976.
- (38) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2169, constructed before 1976.
- (39) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2170, constructed before 1976.
- (40) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2178, constructed in 1998.
- (41) One (1) storage tank, maximum capacity of 2,600 gallons, identified as TS-2209, constructed before 1979.
- (42) One (1) storage tank, maximum capacity of 10,800 gallons, identified as TS-2218, constructed before 1979.
- (43) One (1) storage tank, maximum capacity of 10,690 gallons, identified as TS-2252, constructed prior to 1976.
- (44) One (1) storage tank, maximum capacity of 6,760 gallons, identified as TS-2253, constructed before 1976.
- (45) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2255, constructed before 1976.
- (46) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2264, constructed before 1979.
- (47) One (1) storage tank, maximum capacity of 31,070 gallons, identified as TS-2265, constructed before 1979.
- (48) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2271, constructed in 2005.
- (49) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2272, constructed in 2005.
- (50) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2275, constructed before 1979.
- (51) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2276, constructed before 1979.

- (52) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2277, constructed before 1976.
- (53) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2605, constructed in 1990.
- (54) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2315, constructed in 1990.
- (55) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2362, constructed in 1990.
- (56) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2364, constructed in 1990.
- (57) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2365, constructed in 1990.
- (58) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2367, constructed in 1990.
- (59) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2606, constructed in 1989.
- (60) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.
- (61) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2611, constructed in 1990.
- (62) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2612, constructed in 1990.
- (63) One (1) storage tank, maximum capacity of 30,080 gallons, identified as TS-2613, constructed in 1990.
- (64) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2618, constructed in 1990.
- (65) One (1) storage tank, maximum capacity of 16,920 gallons, identified as TS-2619, constructed in 1990.
- (66) One (1) storage tank, maximum capacity of 2,750 gallons, identified as TP-2550, constructed in 1996, and modified in 2007 to vent to scrubber TP-2636 which exhausts to stack TP-2636.
- (67) One (1) storage tank, maximum capacity of 2,750 gallons, identified as TP-2551, constructed in 1996, and modified in 2007 to vent to scrubber TP-2636 which exhausts to stack TP-2636.
- (68) One (1) storage tank, maximum capacity of 2,970 gallons, identified as TP-2617, constructed in 1990.

SECTION D.8

5.7 MMBtu/hr Boiler

- (z) One (1) natural gas fired boiler, identified as boiler no. B-3, constructed in 1974, rated at 5.7 MMBtu per hour, exhausting at one (1) stack, identified as GB-3404.

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, T089-26668-00227, 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]

- (a) 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:
 - (i) it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1 (34), and

- (ii) 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, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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 April 15 of each year to:

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

and

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

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

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:

- (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, MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue, MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes

or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a responsible official as defined by 326 IAC 2-7-1(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northwest 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 Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.
- This permit shield does not extend to applicable requirements, which are promulgated after the date of issuance of this permit, unless this permit has been modified to reflect such new requirements.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
- (2) The liability of the Permittee for any violation of applicable requirements prior to or

at the time of this permit's issuance;

- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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 T089-7797-00227 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 (Reserved)

B.16 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same

procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 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 shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;

- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

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

B.21 Source Modification Requirement [326 IAC 2-7-10.5][326 IAC 2-2-2][326 IAC 2-3-2]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-3 (for sources located in NA areas).

B.22 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.23 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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.24 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 no later than 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.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)][326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

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

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

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue, MC 61-52 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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited 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 the requirements of 326 IAC 2-7-6(1) by the a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

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

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

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

C.10 (Reserved)

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.12 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]

(Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on August 29, 1996.
- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) 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.13 Risk Management Plan [326 IAC 2-7-5(12)][40 CFR 68]

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

- (a) A Risk Management Plan was prepared as required by 40 CFR 68 and submitted to U.S. EPA. U.S. EPA received the RMP on June 21, 1999.

C.14 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 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 responses steps taken.

C.15 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 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 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]

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:
 - (1) starting in 2007 and every three (3) years thereafter, and
 - (2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.
- (b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6][326 IAC 2-3][326 IAC 2-2]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the

Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
 - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:
- Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue, MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, 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.
- (d) (Reserved)
- (e) The first report shall cover the period commencing on the date of issuance of this permit 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.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for

review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) Group of Boilers
 - (1) One (1) Cleaver-Brooks natural gas fired boiler, Model CB-300HP, identified as B-4, constructed in 1974, rated at 12.55 MMBtu per hour, and exhausting at one (1) stack, identified as GB-3401.
 - (2) One (1) Cleaver-Brooks natural gas fired boiler, Model CB-200-500, identified as B-5, constructed in 1980, rated at 20.92 MMBtu per hour, and exhausting at one (1) stack, identified as GB-3402.
 - (3) One (1) Superior–Mohawk natural gas fired boiler, identified as B-6, constructed in 1988, rated at 20 MMBtu per hour, and exhausting at one (1) stack, identified as GB-3403.

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

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

D.1.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2][326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6.8-2-19 (Lake County PM₁₀ emission requirements) PM₁₀ emissions from the Cleaver-Brooks boiler B-4 (Stack GB-3401) shall be limited to seven-thousandths (0.007) pounds per million Btu, and 0.09 pounds per hour.
- (b) Pursuant to 326 IAC 6.8-2-19 (Lake County PM₁₀ emission requirements) PM₁₀ emissions from the Cleaver-Brooks boiler B-5 (Stack GB-3402) shall be limited to seven-thousandths (0.007) pounds per million Btu, and 0.14 pounds per hour.
- (c) Pursuant to 326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(d)) the particulate emissions from the combustion of natural gas from boiler B-6 (Stack GB-3403) shall be limited to 0.387 pounds per million Btu, and 7.44 pounds per hour.

The above limit is established by the following equation:

$$Pt = (1.09)/(Q^{0.26})$$

Where:

Pt	=	Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q	=	Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

SECTION D.2

FACILITY OPERATION CONDITIONS

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

Chlorination process with a nominal capacity of 3,000 pounds per hour of chlorine feed to produce short to long chain chlorination paraffins, olefins, waxes, polybutene, and 4,821 pounds per hour of muriatic acid. The chlorination system consists of the following systems:

- (b) The system consisting of:
- (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;
 - (2) Four (4) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;
 - (3) One (1) sulfur monochloride tank, identified as TS-1058, constructed in 1981, with a maximum capacity of 5,470 gallons;
 - (4) One (1) acid tower condensate neutralization tank, identified as TP-2030, constructed before 1976, with a maximum capacity of 500 gallons;
 - (5) Two (2) chlorine railcar track spots, identified as RC-0101 and RC-0201, constructed before 1976, with a maximum capacity of 1 railcar (containing at most 180,600 pounds) each;
 - (6) One (1) acid tower, identified as CB-2060, constructed before 1976, with a maximum capacity of 4,821 lb/hr muriatic acid;
 - (7) One (1) tower product acid tank, identified as TP-2033, constructed before 1976, with a maximum capacity of 560-gallons;
 - (8) One (1) tower water feed tank, identified as TP-2060 (constructed in 1996), with a maximum capacity of 560-gallons; and
 - (9) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined.

all controlled by seven (7) scrubbers, identified as TP-2061 (constructed before 1976), TP-2062 (constructed before 1976), TP-2063 (constructed before 1976), TP-2064 (constructed before 1976), TP-2065 (constructed in 1977), TP-2066 (constructed in 1977), and TP-2067 (constructed in 1995), and exhausting at seven (7) stacks, identified as Stacks TP-2061 to 2067.

- (c) The system consisting of:
- (1) Three (3) muriatic acid tanks, identified as TS-1090 (constructed in 1979), TS-1091 (constructed in 1980), and TS-1093 (constructed in 2000), with a maximum capacity of 16,000, 14,900 and 16,000 gallons, respectively;

(2) Two (2) hypochlorite reduction tanks, identified as TP-3494, and TP-3495 (constructed in 1993), with a maximum capacity of 6,250 gallons each;

(3) One (1) muriatic acid tank truck loading station, constructed in 1979, with a maximum capacity of 1 truck;

controlled by one (1) caustic scrubber identified as TP-1099 constructed in 1980 exhausting at one (1) stack, identified as Stack TP-1099.

(d) The system consisting of:

(1) One (1) chlorinated product tank, identified as TS-2041, constructed before 1976, with a maximum capacity of 4,000 gallons;

(2) Two (2) chlorinated product tanks, identified as TS-2043, and TS-2044, constructed before 1976, with a maximum capacity of 4,100 gallons each; and

(3) One (1) chlorinated product-drumming tank, identified as TS-2012, constructed in 1978, with a maximum capacity of 1,500 gallons.

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

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

D.2.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2][326 IAC 6.8-1-5]

Pursuant to 326 IAC 6.8-2-19, the allowable PM₁₀ emission rate from the Chlorination process shall not exceed 0.001 pounds per ton, and 0.003 pounds per hour. Pursuant to 326 IAC 6.8-1-5(d), the Chlorination process shall comply with both limits.

D.2.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the Permittee shall maintain a record and submit to Compliance Branch, OAQ, IDEM a report containing the following information:

(a) The vessel identification number

(b) The vessels dimension

(c) The vessel capacity

for each of the following vessels.

(1) TS-2012

(2) TS-2041

(3) TS-2043

(4) TS-2044

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the chlorination process and any 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 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.4 Scrubber Operation Requirements

The scrubber control system shall be in operation at all times when the chlorination system is in operation.

D.2.5 Hydrochloric Acid (HCl) and Chlorine (Cl₂)

Caustic Scrubber: The caustic strength operations limit shall be no less than 4%. If a representative sample taken during any 8-hour shift shows a caustic percent reading of 4% or less, then the Permittee shall take one of the following steps:

- (1) Fresh caustic will be added to the scrubber; or
- (2) The caustic solution will be changed within 8 hours of test reading; or
- (3) The process will be vented to the backup scrubbers; or
- (4) The process shall be shutdown and the caustic solution changed before the process is started up.

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

D.2.6 Parametric Monitoring

The Permittee shall test the concentration (% by weight) of caustic in the chlorination scrubbers once per day.

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

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records once per day of the caustic concentration in the chlorination scrubbers. The Permittee shall include in its daily record when a caustic concentration is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).
- (b) All records shall be maintained. with Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to Record Keeping

SECTION D.3

FACILITY OPERATION CONDITIONS

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

Sulfurization process - with a nominal capacity of 7000 pounds per hour of sulfurized products consisting of the following equipment:

- (e) The system consisting of:
 - (1) Three (3) sulfurization reactors, identified as TR-2120, TR-2121, and TR-2123, constructed before 1976, with maximum capacity of 3,700, 3,700, and 7,500 gallons, respectively, and one (1) sulfurization reactor. Identified as TR-2128, constructed in 2010, with a maximum capacity of 7,500 gallons controlled by two (2) caustic scrubbers operating in series, identified as TP-2162 and TP-2163, followed by an activated carbon system for odor management and exhausting at Stack TP-2163. Three (3) integral reflux condensers associated with sulfurization reactors TR-2120, TR-2121, and TR-2128. Two (2) quench tanks, identified as TP-2121a and TP-2121B, constructed in 1993 and 2010, with maximum capacities of 850 gallons and 1,200 gallons, respectively, which contain olefins and heavy oil, and which function as an emergency quench for reactor malfunctions.
 - (2) Five (5) blowing tanks, identified as TP-2150 (constructed in 1977), TP-2151 (constructed in 1977), TP-2152 (constructed in 1977), TP-2153 (constructed in 1977), and TP-2154 (constructed in 1997), with maximum capacity of 11,000, 9,650, 11,500, 4,000, and 7,600 gallons, respectively, venting to a blowing tank knockout tank identified as TP-2159 (constructed prior to 1976), controlled by two (2) caustic scrubbers, identified as TP-2162 and TP-2163 and exhausting at Stack TP-2163.
 - (3) One (1) knockout storage tank, identified as TS-2164, constructed in 1976, with a maximum capacity of 1,500 gallons, exhausted to a containment scrubber, identified as TP-2167, constructed in 1995, and exhausting at Stack TP-2167.
 - (4) One (1) scrubber liquor storage tank, identified as TS-1028 constructed in 1980, with a maximum capacity of 11,075 gallons.
 - (5) Two (2) molten sulfur storage tanks, identified as TS-2190 and TP-2190, constructed in 1976.
 - (6) One (1) filter feed tank, maximum capacity of 3,000 gallons, identified as TP-2207, constructed prior to 1976.

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

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

D.3.1 Lake County PM₁₀ Emission Requirements [326 IAC 6.8-2][326 IAC 6.8-1-5]

Pursuant to 326 IAC 6.8-2-19, the allowable PM₁₀ emission rate from the Sulfurization process shall not exceed 0.157 pounds per ton, and 0.23 pounds per hour. Pursuant to 326 IAC 6.8-1-5(d), the Sulfurization process shall comply with both limits.

D.3.2 PSD Minor Limit [326 IAC 2-2]

H₂S emissions from the sulfurization process shall not exceed ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit shall limit H₂S emissions from the sulfurization process to less

than ten (10) tons per year and shall render 326 IAC 2-2 not applicable to the sulfurization process

D.3.3 Emission Offset Minor Limit [326 IAC 2-3]

VOC emissions from the sulfurization process shall not exceed twenty five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit shall limit VOC emissions from the sulfurization process to less than twenty five (25) tons per year and shall render 326 IAC 2-3 not applicable to the entire source.

D.3.4 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the Permittee shall maintain a record and submit to Compliance Branch, OAQ, IDEM a report containing the following information for VOC storage tank TS-1028:

- (a) The vessel identification number
- (b) The vessels dimension
- (c) The vessel capacity

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the sulfurization process and any 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

D.3.6 H2S Emissions

Compliance with the limit in Condition D.3.2 shall be demonstrated using the following equation:

$$\text{H2S emissions (tons/month)} = T_{\text{sulfurization process}} * \text{EF}_{\text{sulfurH2S}} * 1 \text{ ton}/2000 \text{ lbs}$$

Where

$T_{\text{sulfurization process}}$ = Throughput of sulfurized product to the sulfurization process (tons/month)

$\text{EF}_{\text{sulfurH2S}}$ = 1.936 lbs of H2S per ton of sulfurized product (or an emission factor determined by the most recent valid compliance demonstration)

D.3.7 VOC Emissions

Compliance with the limit in Condition D.2.4 shall be demonstrated using the following equation:

$$\text{VOC emissions (tons/month)} = T_{\text{sulfurized products processed}} * \text{EF}_{\text{sulfurVOC}} * 1 \text{ ton}/2000 \text{ lbs}$$

Where

$T_{\text{sulfurization process}}$ = Throughput of sulfurized products processed to the sulfurization process (tons/month)

$\text{EF}_{\text{sulfurVOC}}$ = 0.736 lbs of VOC per ton of sulfur sulfurized product (or an emission factor determined by the most recent valid compliance demonstration)

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

D.3.8 Hydrogen Sulfide (H₂S) and VOC [326 IAC 2-7-10.5]

- (a) In demonstrate compliance with D.3.2 and D.3.3, the sulfurization scrubber for H₂S controls shall be in operation and control emissions from the sulfurization process at all times the sulfurization process is in operation.
- (b) Caustic Scrubber - First Stage of Series: The caustic strength operations limit shall be no less than 1%. If a representative sample taken during any 8-hour shift shows a caustic percent reading of 1% or less, then the Permittee shall take one of the following steps:

- (1) The caustic solution will be changed within 8 hours of test reading; or
 - (2) The process shall be shutdown and the caustic solution changed before the process is started up.
- (c) Caustic Scrubber - Second Stage of Series: The caustic strength at the second stage operations limit shall be no less than 10%.
- (d) The on-site Quality Control laboratory shall randomly test one of the 5-day split samples retained per week, unless the process is down for five consecutive days to verify the accuracy of operations data. Enough sample of the randomly tested sample shall also be retained so that an analysis can be run if so requested by the IDEM, OAQ within 5 day holding period. Upon request of IDEM, OAQ, a sample of the scrubber caustic solution shall be provided and/or the IDEM, OAQ may witness a sample collection and test of the scrubber solution.

D.3.9 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

- (a) Within 180 days of issuance of this permit, the Permittee shall conduct a H₂S performance test as per condition D.3.6 and establish the caustic concentration (% by weight), hourly average operating temperature and minimum liquid circulation volume in the second stage sulfurization scrubber using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (a) Within 180 days of issuance of this permit, the Permittee shall conduct a VOC performance test as per condition D.3.7 and establish the caustic concentration (% by weight), hourly average operating temperature and minimum liquid circulation volume in the second stage sulfurization scrubber using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Monitoring Requirements

D.3.10 Parametric Monitoring

- (a) The Permittee shall calibrate, maintain, and operate a continuous monitoring system on the second stage sulfurization scrubber for measuring hourly average operating temperature. From the date of issuance of this permit until the approved stack test results are available the hourly average temperature of the scrubber shall not exceed 170°F.
- (b) (1) The Permittee shall monitor the concentration (% by weight) of caustic once per day and the scrubber liquid flow rate in second stage sulfurization scrubber once per hour. From the date of issuance of this permit until the approved stack test results are available the concentration (% by weight) of caustic and the scrubber liquid flow rate of the scrubber shall not be lower than 10% and 80 gallons per minute, respectively.
- (2) The Permittee shall test the concentration (% by weight) of caustic in first stage sulfurization scrubber once per day.
- (c) The Permittee shall monitor the volume and caustic concentration charged to the scrubbers during the recharge operations once per day.
- (d) Split samples taken from the second stage scrubber shall be maintained at the facility for the most current five day calendar period.

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

D.3.11 Record Keeping Requirements

- (a) To document the compliance status with Conditions 3.2, 3.3, 3.5, and 3.6, the Permittee shall maintain records of:
- (1) The amount of sulfur used and sulfurization products manufactured for each month.
 - (2) To document the compliance status with Condition D.3.2, the Permittee shall maintain record of H₂S emission calculations performed using the equation found in Condition D.3.6
 - (3) To document the compliance status with Condition D.3.3, the Permittee shall maintain record of VOC emission calculations performed using the equation found in Condition D.3.7
 - (4) The hourly average operating temperature of the second stage of the scrubber.
 - (5) Records of the per day caustic concentration and per hour liquid flow rate in second stage of the scrubber.
 - (6) Per day records of the caustic concentration in the first stage of the scrubber.
 - (7) Daily volume and caustic concentration charged to the scrubbers during recharge.
- (b) Pursuant to 326 IAC 8-9-6, the Permittee shall keep readily accessible records of each storage tank listed in Condition D.3.4 for the life of the tank.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.3.12 Reporting Requirements

The Permittee shall submit a quarterly report of data required by condition D.3.2 and D.3.3 no later than 30 days following the reporting period using the reporting forms located at the end of this permit, or their equivalent.

SECTION D.4

FACILITY OPERATION CONDITIONS

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

Hi-Temp Process - with a maximum rated capacity of 4,200 pounds per hour of hi-temp products consisting of the following equipment:

- (f) The system consisting of:
 - (1) One (1) reactor, identified as TR-2620, constructed in 1989, with a maximum capacity of 4,000 gallons;
 - (2) Two (2) recovered methanol tanks, identified as TS-2602 and TS-2603, constructed in 1989, with maximum capacity of 2,500, and 4,000 gallons, respectively;
 - (3) One (1) sludge tank, identified as TP-2604, constructed in 1989, with a maximum capacity of 750 gallons, equipped with a sludge drumming operation followed by an activated carbon filter for odor management;
 - (4) One (1) scrubber liquor tank, identified as TS-2610, constructed in 2001, with a maximum capacity of 10,000 gallons; and
 - (5) One (1) intermediate holding tank, identified as TP-2601, constructed in 1989, with a maximum capacity of 4,550 gallons;

all controlled by two (2) caustic scrubbers identified as TP-2624 and TP-2626, constructed in 1989; and one flare, identified as GB-2627, constructed in 1990, in series, and exhausting at one (1) stack, identified as Stack GB-2627.

- (g) One (1) scrubber liquor truck loading station, constructed in 1989, controlled by a carbon drum, identified as TF-2610 constructed in 2001.

- (h) The system consisting of:
 - (1) One (1) reactor, identified as TP-2553, constructed in 1993, with a maximum capacity of 2,100 gallons.
 - (2) One (1) reactor, identified as TR-2541, constructed in 2005, with a maximum capacity of 3,500 gallons.
 - (3) Three (3) wash water tanks, identified as TP-2556, TP-2557, and TP-2558, constructed in 1996, each with a maximum capacity of 700 gallons.

All controlled by one (1) caustic scrubber, identified as TP-2589, exhausting at Stack-2589.

- (i) One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.
- (j) One (1) PIB heat up tank, identified as TP02542, constructed in 2010, with a maximum capacity of 5,000 gallons.
- (k) One (1) overflow tank, identified as TP-2537, permitted in 2010, with a maximum capacity of 2,000 gallons.
- (l) One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons, equipped with an integral multi-stage steam educator and condenser system followed by a carbon drum and one (1) emergency overflow tank, identified as TP-

2760, permitted in 2010, with a maximum capacity of 1,300 gallons, and one (1) reactor, identified as TR-2016, constructed in 1990, with a maximum capacity of 4,000 gallons, with emissions controlled by a scrubber, TP-2072.

(m) The system consisting of:

- (1) One (1) filter feed tank, identified as TP-2720, constructed in 1995, with maximum capacity of 5,000 gallons.
- (2) One (1) filter, identified at GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet per filter cake.
- (3) One (1) filter, identified as Gf-2734, constructed in 2005, with a maximum capacity of 41 cubic feet per filter cake.
- (4) One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.
- (5) One (1) flush tank, identified as TP-2726, constructed in 2010, with a maximum capacity of 1,300 gallons.

All controlled by a carbon drum, identified as TF-2728, exhausting to Stack TF-2728.

- (n) Two (2) filtrate tanks, identified as TP-2730 and TP-2732, constructed in 1995 and 2010, respectively, with a maximum capacity of 12,500 gallons each.
- (o) Two (2) neutralization storage tanks, identified as TP-2538 and TP-2539, permitted in 2010, with a maximum capacity of 12,500 gallons, each.
- (p) One (1) amine storage tank, identified as TS-2391, permitted in 2010, with a maximum capacity of 7,950 gallons.

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

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

D.4.1 Particulate Emissions Limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations; modification by commissioner [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2 The particulate matter (PM) emissions from the emission units, identified as TR-2620, and the filtration process shall not exceed 0.03 grain per dry standard cubic foot, dscf, each.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the Hi-Temp process and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.5

FACILITY OPERATION CONDITIONS

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

Fuel Additive Process - with a maximum rated capacity of 12,000 pounds per hour of fuel additives (prior to blending) consisting of the following equipment:

- (q) The system consisting of:
- (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;
 - (2) Four (4) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;
 - (3) One (1) reactor, identified as TR-2016 (constructed in 1990), which discharges process water (condensate) to the condenser or the bypass system with a maximum capacity of 4,000 gallons;
 - (4) One (1) EDA recycle tank, identified as TP-2052 (constructed in 1985), with a maximum capacity of 1,700 gallons;
- controlled by a scrubber identified as TP-2072 (constructed in 1985), and exhausting at a stack identified as Stack TP-2072.
- (r) One (1) virgin EDA tank, identified as TS-1027, (constructed in 1985), maximum capacity of 14,930 gallons, controlled by a carbon adsorption drum identified as TF-1027, and exhausting at stack identified as Stack TF-1027.
- (s) One (1) continuous wash system consisting of tanks TP-2339, TP-2328, TP-2334, TP-2333, TP-2331, TP-2330, TP-2340, TP-2349, TP-2348, one (1) 300 gallon feed tank identified as TP-2329, one (1) butanol recovery column identified as CS-2329, and one stripping column identified as CD-2319, controlled by one (1) vent condenser identified as XT-2313 and exhausting to stack XT-2313.
- (t) One (1) continuous wash system consisting of tanks TP-2350, TP-2359, TP-2353, TP-2354, TP-2351, TP-2352, TP-2355, TP-2356, TP-2357, one (1) butanol water feed tank identified as TP-2358, one (1) butanol recovery column identified as CS-2368, and one stripping column identified as CD-2350, controlled by one (1) vent condenser identified as XT-2350 and exhausting to stack XT-2350.
- (u) Four (4) product rundown tanks, identified as TP-1035, TP-1036 (both constructed in 1985), TP-2360, and TP-2361 (both constructed in 1990), maximum capacity of 6,800 gallons each.
- (v) Three (3) fuel additive blending tanks, identified as TP-1030, TP-1031, and TP-1032 (all constructed in 1985), with maximum capacities of 11,740, 15,220, and 11,740 gallons, respectively.

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

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

D.5.1 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the Permittee shall maintain a record and submit to Compliance Branch, OAQ, IDEM a report containing the following information:

- (a) The vessel identification number
- (b) The vessels dimension
- (c) The vessel capacity

for each of the following vessels:

- (1) TP-1030
- (2) TP-1031
- (3) TP-1032

D.5.2 Record Keeping Requirements

Pursuant to 326 IAC 8-9-6, the Permittee shall keep readily accessible records of each storage tank listed in Condition D.5.1 for the life of the storage tank.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the Fuel Additive process and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.6

FACILITY OPERATION CONDITIONS

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

Miscellaneous Process - with a maximum rated capacity of 3,000 pounds per hour consisting of the following equipment:

- (w) Four (4) reactors, identified as TR-2224 (constructed in 1980), TR-2225 (constructed before 1976), TR-2226 (constructed before 1976), TR-2227 (constructed before 1976), maximum capacity of 5,500, 2,000, 7,000, and 400 gallons, respectively; controlled by two (2) wet scrubbers, identified as PE-2228, and TP-2332, and exhausting at stacks identified as Stack PE-2228, and Stack TP-2332.
- (x) Two (2) reactors, identified as TR-2329 (constructed in 1986), and TR-2322 (constructed in 1984), maximum capacity of 1,500, and 2,000 gallons, respectively.

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

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

D.6.1 Particulate Emission Limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations; modification by commissioner [326 IAC 6.8-1-2]

The particulate matter (PM) emissions from the emission units, identified as TR-2224, TR-2225, TR-2226, TR-2227, TR-2329 and TR-2322 shall not exceed 0.03 grain per dry standard cubic foot, dscf, each.

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

- (y) Storage tanks emitting less than one (1) ton per year collectively of a combination of HAPs and less than fifteen (15) pounds per day of VOC. [326 IAC 12, and 40 CFR 60.112b(a)]
 - (1) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1001, constructed in 1997.
 - (2) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1002, constructed in 1997.
 - (3) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1003, constructed in 1993.
 - (4) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1004, constructed in 1978.
 - (5) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1005, constructed in 1978.
 - (6) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1006, constructed in 1978.
 - (7) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1007, constructed in 1978.
 - (8) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1008, constructed in 1978.
 - (9) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1009, constructed in 1978.
 - (10) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1010, constructed in 1978.
 - (11) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1011, constructed in 1978.
 - (12) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1012, constructed in 1978.
 - (13) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1013, constructed in 1978.
 - (14) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1014, constructed in 1978.
 - (15) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1015, constructed in 1987.
 - (16) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1016, constructed in 1978.

- (17) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1017, constructed in 1978.
- (18) One (1) storage tank, maximum capacity of 21,050 gallons, identified as TS-1018, constructed in 1978.
- (19) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1019, constructed in 1996.
- (20) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1020, constructed in 1997.
- (21) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1021, constructed in 1997.
- (22) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1022, constructed in 1996.
- (23) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1023, constructed in 1996.
- (24) One (1) storage tank, maximum capacity of 27,950 gallons, identified as TS-1024, constructed in 1997.
- (25) One (1) storage tank, maximum capacity of 28,760 gallons, identified as TS-1026, constructed in 1980.
- (26) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1033, constructed in 1986.
- (27) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1039, constructed in 1987.
- (28) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1040, constructed in 1987.
- (29) One (1) storage tank, maximum capacity of 15,540 gallons, identified as TS-1042, constructed in 1989.
- (30) One (1) storage or blend tank, maximum capacity of 14,900 gallons, identified as TS-1043, constructed in 1990.
- (31) One (1) wax storage tank, maximum capacity of 20,390 gallons, identified as TS-1056, constructed in 1978.
- (32) One (1) storage tank, maximum capacity of 20,390 gallons, identified as TS-1057, constructed in 1978.
- (33) One (1) storage tank, maximum capacity of 4,010 gallons, identified as TS-1081, constructed in 1989.
- (34) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1082, constructed in 1989.

- (35) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2160, constructed before 1976.
- (36) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2163, constructed before 1976.
- (37) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2168, constructed before 1976.
- (38) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2169, constructed before 1976.
- (39) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2170, constructed before 1976.
- (40) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2178, constructed in 1998.
- (41) One (1) storage tank, maximum capacity of 2,600 gallons, identified as TS-2209, constructed before 1979.
- (42) One (1) storage tank, maximum capacity of 10,800 gallons, identified as TS-2218, constructed before 1979.
- (43) One (1) storage tank, maximum capacity of 10,690 gallons, identified as TS-2252, constructed prior to 1976.
- (44) One (1) storage tank, maximum capacity of 6,760 gallons, identified as TS-2253, constructed before 1976.
- (45) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2255, constructed before 1976.
- (46) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2264, constructed before 1979.
- (47) One (1) storage tank, maximum capacity of 31,070 gallons, identified as TS-2265, constructed before 1979.
- (48) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2271, constructed in 2005.
- (49) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2272, constructed in 2005.
- (50) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2275, constructed before 1979.
- (51) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2276, constructed before 1979.
- (52) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2277, constructed before 1976.
- (53) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2605, constructed in 1990.
- (54) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2315, constructed in 1990.

- (55) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2362, constructed in 1990.
- (56) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2364, constructed in 1990.
- (57) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2365, constructed in 1990.
- (58) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2367, constructed in 1990.
- (59) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2606, constructed in 1989.
- (60) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.
- (61) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2611, constructed in 1990.
- (62) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2612, constructed in 1990.
- (63) One (1) storage tank, maximum capacity of 30,080 gallons, identified as TS-2613, constructed in 1990.
- (64) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2618, constructed in 1990.
- (65) One (1) storage tank, maximum capacity of 16,920 gallons, identified as TS-2619, constructed in 1990.
- (66) One (1) storage tank, maximum capacity of 2,750 gallons, identified as TP-2550, constructed in 1996, and modified in 2007 to vent to scrubber TP-2636 which exhausts to stack TP-2636.
- (67) One (1) storage tank, maximum capacity of 2,750 gallons, identified as TP-2551, constructed in 1996, and modified in 2007 to vent to scrubber TP-2636 which exhausts to stack TP-2636.
- (68) One (1) storage tank, maximum capacity of 2,970 gallons, identified as TP-2617, constructed in 1990.

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

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

D.7.1 Volatile Organic Liquid Storage Vessels [326 IAC 12][40 CFR 60, Part Kb]

Pursuant to 40 CFR 60.116b, the Permittee shall keep readily accessible records showing the dimensions of the storage tanks and an analysis showing the capacities of the following storage tanks.

- (1) TS-1001
- (2) TS-1002
- (3) TS-1003
- (4) TS-1015
- (5) TS-1019
- (6) TS-1020
- (7) TS-1021
- (8) TS-1022
- (9) TS-1023
- (10) TS-1024
- (11) TS-2178
- (12) TS-2315
- (13) TS-2362
- (14) TS-2364
- (15) TS-2365
- (16) TS-2367
- (17) TS-2606
- (18) TS-2606
- (19) TS-2613

D.7.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the Permittee shall maintain a record and submit to Compliance Branch, OAQ, IDEM a report containing the following information:

- (a) The vessel identification number
- (b) The vessels dimension
- (c) The vessel capacity

for each of the following vessels.

- (1) TS-1004
- (2) TS-1005
- (3) TS-1006
- (4) TS-1007
- (5) TS-1008
- (6) TS-1009
- (7) TS-1010
- (8) TS-1011
- (9) TS-1012
- (10) TS-1013
- (11) TS-1014
- (12) TS-1016
- (13) TS-1017
- (14) TS-1018
- (15) TS-1026
- (16) TP-1033
- (17) TS-1039
- (18) TS-1040
- (19) TS-1042
- (20) TS-1043
- (21) TS-1056

- (22) TS-1057
- (23) TS-1081
- (24) TS-1082
- (25) TS-2160
- (26) TS-2163
- (27) TS-2168
- (28) TS-2169
- (29) TS-2170
- (30) TS-2209
- (31) TS-2218
- (32) TS-2252
- (33) TS-2253
- (34) TS-2255
- (35) TS-2264
- (36) TS-2265
- (37) TS-2271
- (38) TS-2272
- (39) TS-2275
- (40) TS-2276
- (41) TS-2277
- (42) TS-2605
- (43) TS-2611
- (44) TS-2612
- (45) TS-2618
- (46) TS-2619
- (47) TP-2550
- (48) TP-2551
- (49) TP-2617

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

D.7.3 Record Keeping Requirements

Pursuant to 40 CFR 60.116b and 326 IAC 8-9-6, the Permittee shall keep readily accessible records of each storage tank required by D.7.1 and D.7.2 for the life of the storage tanks.

SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

Specifically regulated insignificant activities with emissions below significant thresholds:

- (z) One (1) natural gas fired boiler, identified as boiler no. B-3, constructed in 1974, rated at 5.7 MMBtu per hour, exhausting at one (1) stack, identified as GB-3404.

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

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

D.8.1 Particulate Matter Limitation (PM₁₀) [326 IAC 6.8-2][326 IAC 6-2-4]

Pursuant to 326 IAC 6.8-2-19 (Lake County PM₁₀ emission requirements) PM₁₀ emissions from the Cleaver-Brooks boiler B-3 (Stack GB-3404) shall be limited to seven-thousandths (0.007) pounds per million Btu, and 0.07 pounds per hour.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

Chlorination process with a nominal capacity of 3,000 pounds per hour of chlorine feed to produce short to long chain chlorination paraffins, olefins, waxes, polybutene, and 4,821 pounds per hour of muriatic acid. The chlorination system consists of the following systems:

- (a) The system consisting of:
- (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;
 - (2) Five (5) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), TR-2016 (constructed in 1990), and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;
 - (3) One (1) sulfur monochloride tank, identified as TS-1058, constructed in 1981, with a maximum capacity of 5,470 gallons;
 - (4) One (1) acid tower condensate neutralization tank, identified as TP-2030, constructed before 1976, with a maximum capacity of 500 gallons;
 - (5) Two (2) chlorine railcar track spots, identified as RC-0101 and RC-0201, constructed before 1976, with a maximum capacity of 1 railcar (containing at most 180,600 pounds) each;
 - (6) One (1) acid tower, identified as CB-2060, constructed before 1976, with a maximum capacity of 4,821 lb/hr muriatic acid;
 - (7) One (1) tower product acid tank, identified as TP-2033, constructed before 1976, with a maximum capacity of 560-gallons;
 - (8) One (1) tower water feed tank, identified as TP-2060 (constructed in 1996), with a maximum capacity of 560-gallons; and
 - (9) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined. This will not operate after the operation of One (1) chlorine vaporizer, constructed in 2008, identified as XV-2050, with a maximum feed capacity of 5,000 lb/hr chlorine;

all controlled by seven (7) scrubbers, identified as TP-2061 (constructed before 1976), TP-2062 (constructed before 1976), TP-2063 (constructed before 1976), TP-2064 (constructed before 1976), TP-2065 (constructed in 1977), TP-2066 (constructed in 1977), and TP-2067 (constructed in 1995), and exhausting at seven (7) stacks, identified as Stacks TP-2061 to 2067.

- (b) The system consisting of:
- (1) Three (3) muriatic acid tanks, identified as TS-1090 (constructed in 1979), TS-1091 (constructed in 1980), and TS-1093 (constructed in 2000), with a maximum capacity of 16,000, 14,900 and 16,000 gallons, respectively;

- (2) Two (2) hypochlorite reduction tanks, identified as TP-3494, and TP-3495 (constructed in 1993), with a maximum capacity of 6,250 gallons each;
- (3) One (1) muriatic acid tank truck loading station, constructed in 1979, with a maximum capacity of 1 truck;

controlled by one (1) caustic scrubber identified as TP-1099 constructed in 1980 exhausting at one (1) stack, identified as Stack TP-1099.

(c) The system consisting of:

- (1) One (1) chlorinated product tank, identified as TS-2041, constructed before 1976, with a maximum capacity of 4,000 gallons;
- (2) Two (2) chlorinated product tanks, identified as TS-2043, and TS-2044, constructed before 1976, with a maximum capacity of 4,100 gallons each; and
- (3) One (1) chlorinated product-drumming tank, identified as TS-2012, constructed in 1978, with a maximum capacity of 1,500 gallons.

Hi-Temp process - with a maximum rated capacity of 4,200 pounds per hour of hi-temp products consisting of the following equipment:

(d) The system consisting of:

- (1) One (1) reactor, identified as TR-2620, constructed in 1989, with a maximum capacity of 4,000 gallons;
- (2) Two (2) recovered methanol tanks, identified as TS-2602 and TS-2603, constructed in 1989, with maximum capacity of 2,500, and 4,000 gallons, respectively;
- (3) One (1) sludge tank, identified as TP-2604, constructed in 1989, with a maximum capacity of 750 gallons, equipped with a sludge drumming operation followed by an activated carbon filter for odor management;
- (4) One (1) scrubber liquor tank, identified as TS-2610, constructed in 2001, with a maximum capacity of 10,000 gallons; and
- (5) One (1) intermediate holding tank, identified as TP-2601, constructed in 1989, with a maximum capacity of 4,550 gallons;

all controlled by two (2) caustic scrubbers identified as TP-2624 and TP-2626, constructed in 1989; and one flare, identified as GB-2627, constructed in 1990, in series, and exhausting at one (1) stack, identified as Stack GB-2627.

- (e) One (1) scrubber liquor truck loading station, constructed in 1989, controlled by a carbon drum, identified as TF-2610 constructed in 2001.
- (f) One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.
- (g) One (1) filter feed tank, identified as TP-2720, constructed in 1995, with a maximum capacity of 5,000 gallons, controlled by a carbon drum, identified as TF-2728 and exhausting at a stack identified as Stack TP-2728.

- (h) One (1) filtrate tank, identified as TP-2730, constructed in 1995, with a maximum capacity of 5,000 gallons.
- (i) One (1) filter, identified as GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet of filter cake, and one (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet of filter cake, both controlled by a carbon drum, identified as TF-2728, exhausting at stack TF-2728.
- (j) One (1) reactor, constructed in 1993, identified as TP-2553, with a maximum capacity of 2,100 gallons, controlled by scrubber TP-2589.
- (k) One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.
- (l) Three (3) wash water tanks, constructed in 1996, identified as TP-2556, TP-2557 and TP-2558, each with a maximum capacity of 700 gallons.
- (m) One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons.
- (n) One (1) reactor, constructed in 2005, identified as TR-2541, with a maximum capacity of 3,500 gallons, controlled by scrubber TP-2589.

Fuel Additive Process - with a maximum rated capacity of 12,000 pounds per hour of fuel additives (prior to blending) consisting of the following equipment:

- (o) The system consisting of:
 - (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;
 - (2) Four (4) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;
 - (3) One (1) reactor, identified as TR-2016 (constructed in 1990), which discharges process water (condensate) to the condenser or the bypass system with a maximum capacity of 4,000 gallons;
 - (4) One (1) EDA recycle tank, identified as TP-2052 (constructed in 1985), with a maximum capacity of 1,700 gallons;controlled by a scrubber identified as TP-2072 (constructed in 1985), and exhausting at a stack identified as Stack TP-2072.
- (p) One (1) virgin EDA tank, identified as TS-1027, (constructed in 1985), maximum capacity of 14,930 gallons, controlled by a carbon adsorption drum identified as TF-1027, and exhausting at stack identified as Stack TF-1027.
- (q) One (1) continuous wash system consisting of tanks TP-2339, TP-2328, TP-2334, TP-2333, TP-2331, TP-2330, TP-2340, TP-2349, TP-2348, one (1) 300 gallon feed tank identified as TP-2329, one (1) butanol recovery column identified as CS-2329, and one stripping column identified as CD-2319, controlled by one (1) vent condenser identified as XT-2313 and exhausting to stack XT-2313.

One (1) continuous wash system consisting of tanks TP-2350, TP-2359, TP-2353, TP-2354, TP-2351, TP-2352, TP-2355, TP-2356, TP-2357, one (1) butanol water feed tank identified as TP-2358, one (1) butanol recovery column identified as CS-2368, and one stripping column identified as CD-2350, controlled by one (1) vent condenser identified as XT-2350 and exhausting to stack XT-2350.

- (r) Four (4) product rundown tanks, identified as TP-1035, TP-1036 (both constructed in 1985), TP-2360, and TP-2361 (both constructed in 1990), maximum capacity of 6,800 gallons each.
- (s) Three (3) fuel additive blending tanks, identified as TP-1030, TP-1031, and TP-1032 (all constructed in 1985), with maximum capacities of 11,740, 15,220, and 11,740 gallons, respectively.

Miscellaneous Process - with a maximum rated capacity of 3,000 pounds per hour consisting of the following equipment:

- (t) Five reactors, identified as TR-2224 (constructed in 1980), TR-2225 (constructed before 1976), TR-2226 (constructed before 1976), TR-2227 (constructed before 1976), and TR-2228 (constructed before 1976), maximum capacity of 5,500, 2,000, 7,000, 400, and 7,500 gallons, respectively; controlled by two (2) wet scrubbers, identified as PE-2228, and TP-2332, and exhausting at stacks identified as Stack PE-2228, and Stack TP-2332.
- (u) Two (2) reactors, identified as TR-2329 (constructed in 1986), and TR-2322 (constructed in 1984), maximum capacity of 1,500, and 2,000 gallons, respectively.

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

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

E.1.1 HAPs Minor Limits [40 CFR Part 63]

- (a) The total HAP emissions from all temporary operation and experimental trials, implemented pursuant to 326 IAC 2-1.1-3(h)(3), shall be limited to six (6) tons per twelve consecutive month period, with compliance determined at the end of each month.
- (b) Total HCl emissions from all temporary operation and experimental trials, implemented pursuant to 326 IAC 2-1.1-3(h)(3), shall be limited to one (1) ton per twelve consecutive month period, with compliance determined at the end of each month.
- (c) Total Cl₂ emissions from all temporary operation and experimental trials, implemented pursuant to 326 IAC 2-1.1-3(h)(3), shall be limited to three (3) tons per twelve consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, along with HAP emissions from the chlorination process and source wide fugitive HAP emissions from storage tanks, will limit the source-wide potential to emit of single HAP and combined HAP emissions to less than 10 and 25 tons per 12 consecutive month period, respectively, and make the requirements of 40 CFR Part 63, Subpart NNNNN and Subpart A not applicable.

Compliance Determination Requirements

E.1.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee shall perform HAP testing for any temporary operation and experimental trial implemented pursuant to 326 IAC 2-1.1-3(h)(3), during the thirty (30) day trial period, to establish a HAP emission rate for that trial. Tests shall be conducted utilizing methods as approved by the Commissioner, and in accordance with Section C- Performance Testing.

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

E.1.3 Record Keeping Requirements

- (a) The Permittee shall maintain records sufficient to document compliance with Condition E.1.1. These records shall include the following:
- (1) Total production during each experimental trial period.
 - (2) Total raw material input during each experimental trial period.
 - (3) Total HAP input during each experimental trial period.
 - (4) Test data and results for the testing required pursuant to E.1.2.
 - (5) Total emissions from each experimental trial conducted at the source.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.1.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition E.1.1 shall be submitted to the addresses 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Dover Chemical – Hammond Works
Source Address: 3000 Sheffield Avenue, Hammond, IN 46327
Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46327
Part 70 Permit No.: T089-7797-00227

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue, MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Dover Chemical- Hammond Works
Source Address: 3000 Sheffield Avenue, Hammond, IN 46327
Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46327
Part 70 Permit No.: T089-7797-00227

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
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: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Dover Chemical Corporation - Hammond Works
Source Address: 3000 Sheffield Avenue, Hammond, IN 46320
Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46320
Part 70 Permit No.: T089-7797-00227
Facility: Sulfurization Process

YEAR: _____

Month	Sulfur Used	Sulfur Used	Sulfur Used
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Dover Chemical Corporation - Hammond Works
 Source Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Part 70 Permit No.: T089-7797-00227
 Facility: Sulfurization process
 Limit: Less than 37,000 tons of sulfurization products per 12 consecutive month period

YEAR: _____

Month	Sulfurization Products	Sulfurization Products	Sulfurization Products
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Dover Chemical Corporation - Hammond Works
 Source Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Part 70 Permit No.: T089-7797-00227
 Facility: Temporary operation and experimental trials, implemented pursuant to 326 IAC 2-1.1-3(h)(3) (Facilities Identified in Section E.1)
 Limit: 6 Tons total HAP emissions per 12 consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Total HAP Emissions	Total HAP emissions	Total HAP Emissions
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Dover Chemical Corporation - Hammond Works
 Source Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Part 70 Permit No.: T089-7797-00227
 Facility: Temporary operation and experimental trials, implemented pursuant to 326 IAC 2-1.1-3(h)(3) (Facilities Identified in Section E.1)
 Limit: 1 Ton total HCl emissions per 12 consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Total HCl Emissions	Total HCl emissions	Total HCl Emissions
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: Dover Chemical Corporation - Hammond Works
 Source Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46320
 Part 70 Permit No.: T089-7797-00227
 Facility: Temporary operation and experimental trials, implemented pursuant to 326 IAC 2-1.1-3(h)(3) (Facilities Identified in Section E.1)
 Limit: 3 Tons total Cl₂ emissions per 12 consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Total Cl ₂ Emissions	Total Cl ₂ emissions	Total Cl ₂ Emissions
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

COMPLIANCE AND ENFORCEMENT BRANCH

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Dover Chemical – Hammond Works
 Source Address: 3000 Sheffield Avenue, Hammond, IN 46327
 Mailing Address: 3000 Sheffield Avenue, Hammond, IN 46327
 Part 70 Permit No.: T089-7797-00227

Months: _____ to _____ Year: _____

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification

Source Description and Location

Source Name:	Dover Chemical – Hammond Works
Source Location:	3000 Sheffield Ave., Hammond, IN 46327
County:	Lake
SIC Code:	2899
Operation Permit No.:	T089-26668-00227
Operation Permit Issuance Date:	December 10, 2008
Significant Source Modification No.:	089-29495-00227
Significant Permit Modification No.:	089-29496-00227
Permit Reviewer:	Jillian Bertram

Public Notice Information

On November 1, 2010, the Office of Air Quality (OAQ) had a notice published in the Post Tribune in Munster, Indiana and The Times in Merrillville, Indiana, stating that the Dover Chemical - Hammond Works had applied for a significant modification to their Part 70 Operating Permit issued on December 10, 2008, to modify descriptions of existing units, remove emission units from the permit, add units to the permit, incorporate the manufacturing different products on existing equipment, and to modify the Hi-Temp process. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments Received

OAQ received comments from the following people (and groups of people):

- Dover Chemical - Hammond Works

The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

The IDEM does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document comments, responses to comments and changes made from the time the permit was drafted until a final decision is made.

Company Comments and IDEM's Responses

On October 28, 2010, OAQ received comments from Mark Renick, on behalf of Dover Chemical - Hammond Works. The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Company Comment 1:

Please revise the description of the terms in Conditions 3.6 and 3.7 to reflect that the emission factors are based on the sulfurized product.

IDEM Response 1:

D.3.6 H2S Emissions

Compliance with the limit in Condition D.3.2 shall be demonstrated using the following equation:

$$\text{H2S emissions (tons/month)} = T_{\text{sulfurization process}} * EF_{\text{sulfurH2S}} * 1 \text{ ton/2000 lbs}$$

Where

$T_{\text{sulfurization process}}$ = Throughput of sulfurized product to the sulfurization process (tons/month)

$EF_{\text{sulfurH2S}}$ = 1.936 lbs of H2S per ton of ~~sulfur processed~~ **sulfurized product** (or an emission factor determined by the most recent valid compliance demonstration)

D.3.7 VOC Emissions

Compliance with the limit in Condition D.2.4 shall be demonstrated using the following equation:

$$\text{VOC emissions (tons/month)} = T_{\text{sulfurized products processed}} * EF_{\text{sulfurVOC}} * 1 \text{ ton/2000 lbs}$$

Where

$T_{\text{sulfurized products processed}}$ ~~sulfurization process~~ = Throughput of sulfurized products processed to the sulfurization process (tons/month)

$EF_{\text{sulfurVOC}}$ = 0.736 lbs of VOC per ton of ~~sulfur processed~~ **sulfurized product** (or an emission factor determined by the most recent valid compliance demonstration)

IDEM Contact

Questions regarding this proposed permit can be directed to:

Jillian Bertram
Indiana Department Environmental Management
Office of Air Quality
100 North Senate Avenue
MC 61-53, Room 1003
Indianapolis, Indiana 46204-2251
Toll free (within Indiana): 1-800-451-6027 extension 3-1782
Or dial directly: (317) 233-1782
jbertram@idem.in.gov

Please refer to Significant Source Modification No.: 089-29495-00227 and Significant Permit Modification No. 089-29496-00227 in all correspondence.

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

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

Source Description and Location

Source Name:	Dover Chemical – Hammond Works
Source Location:	3000 Sheffield Ave., Hammond, IN 46327
County:	Lake
SIC Code:	2899
Operation Permit No.:	T089-26668-00227
Operation Permit Issuance Date:	December 10, 2008
Significant Source Modification No.:	089-29495-00227
Significant Permit Modification No.:	089-29496-00227
Permit Reviewer:	Jillian Bertram

Existing Approvals

The source was issued Part 70 Operating Permit No. 089-26668-00227 on December 10, 2008. The source has since received the following approvals:

- (a) Administrative Amendment No. 089-28490-00227, issued on September 25, 2009; and
- (b) Administrative Amendment No. 089-29282-00227, issued on July 9, 2010.

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O ₃	Attainment effective June 4, 2010. ¹
PM ₁₀	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.	

- (a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the

Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Lake 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}

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for PM_{2.5}. On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM_{2.5} promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Lake County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

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

Source Status

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

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

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This source is not a major source for Nonattainment NSR for PM_{2.5} because PM_{2.5} emissions are less than 100 tons per year.

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

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Dover Chemical – Hammond Works on June 26, 2010, relating to modifications in descriptions of existing units, removing emission units from the permit, add units to the permit, manufacturing different products on existing equipment, and modifying the Hi-Temp process. The following is a list of the proposed, modified, and removed emission units and pollution control devices:

New Units and Units with Modified Descriptions:

- (a) One (1) sulfurization reactor, identified as TR-2128, approved for construction in 2010, with a maximum capacity of 7,500 gallons with emissions controlled by two (2) caustic scrubbers operating in series, identified as TP-2162 and TP-2163 followed by an activated carbon system for odor management and exhausting to Stack TP-2163.
- (b) Two (2) integral reflux condensers associated with sulfurization reactors TR-2121 and TR-2128.
- (c) Two (2) quench tanks, identified as TP-2121a and TP-2121b, constructed in 1993 and approved for construction in 2010, with a maximum capacity of 850 gallons and 1200 gallons, respectively, which contain olefins and heavy oil, and which function as emergency quench for reactor malfunctions.
- (d) One (1) PIB heatup tank, identified as TP-2542, approved for construction in 2010, with a maximum capacity of 5000 gallons.
- (e) One (1) flush tank, identified as TP-2726, approved for construction in 2010, with a maximum capacity of 1300 gallons.
- (f) One (1) overflow tank, identified as TP-2537, constructed prior to 1980 and repermited in 2010, with a maximum capacity of 2000 gallons.
- (g) One (1) reactor, identified as TR-2630, constructed in 1990, with a maximum capacity of 4000 gallons equipped with an integral multi-stage steam eductor and condenser system followed by a carbon drum and one (1) emergency overflow tank, identified as TP-2760, constructed in 1995 and repermited in 2010, with a maximum capacity of 1300 gallons and one (1) reactor, identified as TR-2016, constructed in 1990 with a maximum capacity of 4000 gallons, controlled by scrubber TP-2072.
- (h) Two (2) filtrate tanks, identified as TP-2730 and TP-2732, constructed in 1995 and approved for construction in 2010, respectively, with a maximum capacity of 5000 gallons, each.
- (i) One (1) amine storage tank, identified as TS-2391, constructed in 1989 and repermited in 2010, with a maximum capacity of 7950 gallons.
- (j) One (1) storage tank, approved for construction in 2010, with a maximum capacity of 30000 gallons, identified as TS-2607

Modified Units and Units with Modified Descriptions:

- (a) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined. This will not

operate after the construction and operation of One (1) chlorine vaporizer, permitted in 2008, identified as XV-2050, with a maximum feed capacity of 5,000 lb/hr chlorine.

- (b) The system consisting of:
- (1) One (1) reactor, identified as TP-2553, constructed in 1993, with a maximum capacity of 2300 gallons.
 - (2) One (1) reactor, identified as TR-2541, constructed in 2005, with a maximum capacity of 3500 gallons.
 - (3) Three (3) wash water tank, identifies as TP-2556, TP-2557, and TP-2558, constructed in 1996, each with a maximum capacity of 700 gallons.

All controlled by one (1) caustic scrubber, identified as TP-2589, exhausting to Stack TP-2589.

- (c) The system consisting of:
- (1) One (1) filter feed tank, identified as TP-2720, constructed in 1995, with a maximum capacity of 5000 gallons.
 - (2) One (1) filter, identified as GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet of filter cake.
 - (3) One (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet of filter cake.

All controlled by a carbon drum, identified as TF-2728, exhausting to Stack TF-2728

Removed Units:

- (a) One (1) reactor, identified as TR-2016 (constructed in 1990 with a maximum capacity of 4,000 gallons.
- (b) Three (3) fuel additive blending tanks, identified as TP-1030, TP-1031, and TP-1032, all constructed in 1985, with maximum capacities of 11,740, 15,220, and 11,740 gallons, respectively.
- (c) One (1) reactor, identified as TR-2228 (constructed before 1976), maximum capacity of 7,500 gallons.
- (d) One (1) storage tank, maximum capacity of 3,450 gallons, identified as TS-2279, constructed before 1976.
- (e) One (1) storage tank, maximum capacity of 3,450 gallons, identified as TS-2280, constructed before 1976.

“Integral Part of the Process” Determination

The applicant has submitted the following information to justify why the reflux condensers should be considered an integral part of the sulfurization reactors:

- (a) The condensers are necessary to produce a sellable product.

The raw materials are charged in the sulfurization reactors at ratios required to result in a final product that meets the quality specifications of the buyer. Deviations from these

ratios would result in an unsellable product and the entire batch must be discarded. Once the raw materials are added to the reactors, the reactors are then sealed. During the reaction, some materials are boiled off and the condensers function to return this material to the reactors. The condensers are necessary to maintain the balance of raw materials within the reactors in order to produce a sellable final product. Without the condensers it would not be possible to make a product that meets the quality specifications necessary.

- (b) The condensers remove excess heat from the reaction taking place within the reactors.

The reactions occurring in the sulfurization reactors are exothermic. Temperatures must be carefully controlled to prevent a safety hazard. During the reaction, the temperature in the reactors reaches a point where some of the raw products are boiled off. The condensers cool this product and return it to the reactor, thus lowering the temperature in the reactor and eliminating a potential safety hazard.

IDEM, OAQ has evaluated the information submitted and agrees that the reflux condensers should be considered an integral part of the sulfurization reactors. Therefore, the permitting level will be determined using the potential to emit after the reflux condensers. Operating conditions in the proposed permit will specify that these reflux condensers shall operate at all times when the sulfurization reactors are in operation.

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

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

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Before Controls of the Modification	
Pollutant	Potential To Emit (ton/yr)
PM	0.00
PM ₁₀	0.00
PM _{2.5}	0.00
SO ₂	0.00
VOC	33.02
CO	0.00
NO _x	0.00
Single HAPs	1480.44
Total HAPs	1480.33

This source modification is subject to 326 IAC 2-7-10.5(f)(4) because the PTE of VOC is greater than 25 tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d) because there are changes to record keeping and reporting conditions.

Permit Level Determination – PSD or Nonattainment NSR

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	Potential to Emit (ton/yr)							
	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NO _x	H ₂ S
Doverlube PE80	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
Doverlube NCEP	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
Milidin GX-3 / Doverlube B902	0.00	0.00	0.00	0.00	10.814	0.00	0.00	0.00
TS-2391	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00
TP-2607	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
TP-2537	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-2538	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-2539	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TP-2760	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sulfurization Reactor	0.00	0.00	0.00	0.00	10.48	0.00	0.00	<10
PIBSA Process	0.00	0.00	0.00	0.00	11.21	0.00	0.00	0.00
Total for Modification	0.00	0.00	0.00	0.00	33.02	0.00	0.00	<10
PSD Significant Level	25	15	NA	40	40	100	40	10
Nonattainment NSR Major Source Threshold Level	NA	NA	100	NA	NA	NA	NA	NA

This modification to an existing major stationary source for PSD is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than ten (10) tons of hydrogen sulfide per year, this source has elected to limit the potential to emit from the sulfurization reactor.

This modification to an existing minor stationary source is not major for Nonattainment NSR because the emissions of PM_{2.5} sourcewide are still less than the Nonattainment NSR Major Source Threshold level. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment NSR requirements do not apply.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

(a) The new storage tanks, TP-2607, is subject to the New Source Performance Standards for (40 CFR 60.11b, Subpart Kb), which is incorporated by reference as 326 IAC 12.

New storage tank TP-2607 is subject to the following portions of Subpart Kb.

- (1) 40 CFR 60.110b(a)
- (2) 40 CFR 60.111b(b)

(b) New storage tanks, TS-2391, TP-2542, TP-2726, TP-2537, TP-2538, TP-2539, and TP-2760 are not subject to the requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984,, 40 CFR 60.11b, Subpart Kb), because the capacity of each is less than the applicability threshold of 75 cubic meters.

NESHAP:

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this proposed modification.

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

- (1) has a potential to emit before controls equal to or greater than the Part 70 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.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
Sulfurization Reactor – Single HAP (H2S)	Scrubber	Y	1480	<10	10	Y	N

Note: None of the other pollutants' uncontrolled emissions are more than TV major source thresholds.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the sulfurization reactor TR-2128 for H₂S upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-1.1-5 (Nonattainment New Source Review)

Nonattainment New Source Review applicability is discussed under the Permit Level Determination – Nonattainment New Source Review section.

This existing minor source is still a minor source under Nonattainment NSR, 326 IAC 2-1.1-5, because source-wide PM_{2.5} emissions are less than 100 tons per year.

326 IAC 2-2 and 2-3 (PSD)

PSD applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-6 (Emission Reporting)

Since this source is located in Lake County, and has a potential to emit VOC greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 8-1-6 (General VOC Requirements)

This rule does not apply to any of the new or modified units because the potential to emit VOC from each unit is less than 25 tons per year.

New Storage Tanks (TS-2391, TP-2607, TP-2542, TP-2726, TP-2537, TP-2538, TP-2539, TP-2760)

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This rule does not apply to the new storage tanks because each has a capacity less than 39,000 gallons.

Compliance Determination and Monitoring Requirements

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

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

In order to establish an emission factor used to comply with the 326 IAC 2-2 avoidance limit, within 180 days of issuance of this permit, the Permittee shall conduct a H₂S performance as per condition D.3.6 and establish the caustic concentration (% by weight), hourly average operating temperature and minimum liquid circulation volume in the second stage sulfurization scrubber using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

There are no new compliance monitoring requirements.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 089-26668-00227. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Change No. 1

Lake County is now in attainment for ozone. Therefore, the source is no longer a major source for emission offset. However, the source is now a major source for PSD. The Source Status section of the permit has been updated to reflect this.

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

The Permittee owns and operates a stationary chlorinated paraffin manufacturing plant.

Source Address:	3000 Sheffield Avenue, Hammond, IN 46327
Mailing Address:	3000 Sheffield Avenue, Hammond, IN 46327
SIC Code:	2899
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone Nonattainment for PM _{2.5} Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Major Source, under PSD Rules Major Source, under Emission Offset Rules Minor Source, under Nonattainment NSR for PM _{2.5} 1 of 28 Source Categories Minor Source, Section 112 of the Clean Air Act

Change No. 2

Unit descriptions have been updated to reflect added units, removed units, and revised descriptions.

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

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

SECTION D.2 Chlorination system

with a nominal capacity of 3,000 pounds per hour of chlorine feed to produce short to long chain chlorination paraffins, olefins, waxes, polybutene, and 8,035 pounds per hour of muriatic acid. The chlorination system consists of the following systems:

(b) The system consisting of:

- (1) Nine (9) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2006 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), TR-2010 (constructed in 1983), and TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each;
- (2) ~~Five (5)~~ **Four (4)** reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), ~~TR-2016 (constructed in 1990)~~, and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;

- (9) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined.

SECTION D.3 Sulfurization system

with a maximum rated capacity of 8,450 pounds per hour of sulfurized products consisting of the following equipment:

- (e) The system consisting of:
 - (1) Three (3) sulfurization reactors, identified as TR-2120, TR-2121, and TR-2123, constructed before 1976, with maximum capacity of 3,700, 3,700, and 7,500 gallons, respectively, **and one (1) sulfurization reactor. Identified as TR-2128, constructed in 2010, with a maximum capacity of 7,500 gallons** controlled by two (2) caustic scrubbers operating in series, identified as TP-2162 and TP-2163, followed by an activated carbon system for odor management and exhausting at Stack TP-2163. ~~One (1) Three (3) integral reflux condensers~~ associated with sulfurization reactors TR-2120, TR-2121, and TR-2128. **Two(2) quench tanks, identified as TP-2121a and TP-2121B, constructed in 1993 and 2010, with maximum capacities of 850 gallons and 1,200 gallons, respectively, which contain olefins and heavy oil, and which function as an emergency quench for reactor malfunctions.**

SECTION D.4 Hi-Temp System

with a maximum rated capacity of 4,200 pounds per hour of Hi-Temp products consisting of the following equipment:

- (h) ~~One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.~~
The system consisting of:
 - (1) **One (1) reactor, identified as TP-2553, constructed in 1993, with a maximum capacity of 2,100 gallons.**
 - (2) **One (1) reactor, identified as TR-2541, constructed in 2005, with a maximum capacity of 3,500 gallons.**
 - (3) **Three (3) wash water tanks, identified as TP-2556, TP-2557, and TP-2558, constructed in 1996, each with a maximum capacity of 700 gallons.**

All controlled by one (1) caustic scrubber, identified as TP-2589, exhausting at Stack-2589.

- (i) ~~One (1) filter feed tank, identified as TP-2720, constructed in 1995, with a maximum capacity of 5,000 gallons, controlled by a carbon drum, identified as TF-2728 and exhausting at a stack identified as Stack TP-2728.~~

One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum

capacity of 2,100 gallons.

- (j) ~~One (1) filtrate tank, identified as TP-2730, constructed in 1995, with a maximum capacity of 5,000 gallons.~~

One (1) PIB heat up tank, identified as TP02542, constructed in 2010, with a maximum capacity of 5,000 gallons.

- (k) ~~One (1) filter, identified as GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet of filter cake, and one (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet of filter cake, both controlled by a carbon drum, identified as TF-2728, exhausting at stack TF-2728.~~

One (1) overflow tank, identified as TP-2537, permitted in 2010, with a maximum capacity of 2,000 gallons.

- (l) ~~One (1) reactor, constructed in 1993, identified as TP-2553, with a maximum capacity of 2,100 gallons, controlled by scrubber TP-2589.~~

One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons, equipped with an integral multi-stage steam educator and condenser system followed by a carbon drum and one (1) emergency overflow tank, identified as TP-2760, permitted in 2010, with a maximum capacity of 1,300 gallons, and one (1) reactor, identified as TR-2016, constructed in 1990, with a maximum capacity of 4,000 gallons, with emissions controlled by a scrubber, TP-2072.

- (m) ~~One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.~~

The system consisting of:

- (1) One (1) filter feed tank, identified as TP-2720, constructed in 1995, with maximum capacity of 5,000 gallons.**
- (2) One (1) filter, identified at GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet per filter cake.**
- (3) One (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet per filter cake.**
- (4) One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.**
- (5) One (1) flush tank, identified as TP-2726, constructed in 2010, with a maximum capacity of 1,300 gallons.**

All controlled by a carbon drum, identified as TF-2728, exhausting to Stack TF-2728.

- (n) ~~Three (3) wash water tanks, constructed in 1996, identified as TP-2556, TP-2557 and TP-2558, each with a maximum capacity of 700 gallons.~~
- (o) ~~One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons.~~
- (p) ~~One (1) reactor, constructed in 2005, identified as TR-2541, with a maximum capacity of 3,500 gallons, controlled by scrubber TP-2589.~~

- (n) **Two (2) filtrate tanks, identified as TP-2730 and TP-2732, constructed in 1995 and 2010, respectively, with a maximum capacity of 12,500 gallons each.**
- (o) **Two (2) neutralization storage tanks, identified as TP-2538 and TP-2539, permitted in 2010, with a maximum capacity of 12,500 gallons, each.**
- (p) **One (1) amine storage tank, identified as TS-2391, permitted in 2010, with a maximum capacity of 7,950 gallons.**

SECTION D.5 Fuel Additive system

with a maximum rated capacity of 12,000 pounds per hour of fuel additives (prior to blending) consisting of the following equipment:

- ~~(w) Three (3) fuel additive blending tanks, identified as TP-1030, TP-1031, and TP-1032, all constructed in 1985, with maximum capacities of 11,740, 15,220, and 11,740 gallons, respectively.~~

SECTION D.6 Miscellaneous system

with a maximum rated capacity of 3,000 pounds per hour consisting of the following equipment:

- ~~(w)~~**(y) Five (5) reactors, identified as TR-2224 (constructed in 1980), TR-2225 (constructed before 1976), TR-2226 (constructed before 1976), TR-2227 (constructed before 1976), and TR-2322 (constructed in 1984), and TR-2228 (constructed before 1976), maximum capacity of 5,500, 2,000, 7,000,] 400, and 2,000 gallons and 7,500 gallons, respectively; controlled by two (2) wet scrubbers, identified as PE-2228, and TP-2332, and exhausting at stacks identified as Stack PE-2228, and Stack TP-2332.**
- (z) ~~Two (2) One (1) reactors, identified as TR-2329 (constructed in 1986), and TR-2322 (constructed in 1984), maximum capacity of 1,500, and 2,000 gallons, respectively.~~

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):

SECTION D.7 VOC STORAGE TANKS

- ~~(y)~~**(aa) Storage tanks emitting less than one (1) ton per year collectively of a combination of HAPs and less than fifteen (15) pounds per day of VOC. [326 IAC 12, and 40 CFR 60.112b(a)]**

- ~~(53) One (1) storage tank, maximum capacity of 3,450 gallons, identified as TS-2279, constructed before 1976.~~

- ~~(54) One (1) storage tank, maximum capacity of 3,450 gallons, identified as TS-2280, constructed before 1976.~~

- (60) One (1) storage tank, permitted in 2010, identified as TS-2607, with a**

maximum capacity of 30,000 gallons.

SECTION D.2

FACILITY OPERATION CONDITIONS

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

Chlorination process with a nominal capacity of 5,000 pounds per hour of chlorine feed to produce short to long chain chlorination paraffins, olefins, waxes, polybutene, and 4,821 pounds per hour of muriatic acid. The chlorination system consists of the following systems:

(b) The system consisting of:

(2) ~~Five (5)~~ **Four (4)** reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), ~~TR-2016 (constructed in 1990)~~, and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;

(9) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined.

SECTION D.3

FACILITY OPERATION CONDITIONS

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

Sulfurization process - with a maximum rated capacity of 8,450 pounds per hour of sulfurized products consisting of the following equipment:

(e) The system consisting of:

(1) Three (3) sulfurization reactors, identified as TR-2120, TR-2121, and TR-2123, constructed before 1976, with maximum capacity of 3,700, 3,700, and 7,500 gallons, respectively, **and one (1) sulfurization reactor. Identified as TR-2128, constructed in 2010, with a maximum capacity of 7,500 gallons** controlled by two (2) caustic scrubbers operating in series, identified as TP-2162 and TP-2163, followed by an activated carbon system for odor management and exhausting at Stack TP-2163. ~~One (1)~~ **Three (3) integral** reflux condensers associated with sulfurization reactors TR-2120, **TR-2121, and TR-2128. Two(2) quench tanks, identified as TP-2121a and TP-2121B, constructed in 1993 and 2010, with maximum capacities of 850 gallons and 1,200 gallons, respectively, which contain olefins and heavy oil, and which function as an emergency quench for reactor malfunctions.**

SECTION D.4

FACILITY OPERATION CONDITIONS

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

Hi-Temp Process - with a maximum rated capacity of 4,200 pounds per hour of hi-temp products consisting of the following equipment:

- (f) The system consisting of:
- (1) One (1) reactor, identified as TR-2620, constructed in 1989, with a maximum capacity of 4,000 gallons;
 - (2) Two (2) recovered methanol tanks, identified as TS-2602 and TS-2603, constructed in 1989, with maximum capacity of 2,500, and 4,000 gallons, respectively;
 - (3) One (1) sludge tank, identified as TP-2604, constructed in 1989, with a maximum capacity of 750 gallons, equipped with a sludge drumming operation followed by an activated carbon filter for odor management;
 - (4) One (1) scrubber liquor tank, identified as TS-2610, constructed in 2001, with a maximum capacity of 10,000 gallons; and
 - (5) One (1) intermediate holding tank, identified as TP-2601, constructed in 1989, with a maximum capacity of 4,550 gallons;

all controlled by two (2) caustic scrubbers identified as TP-2624 and TP-2626, constructed in 1989; and one flare, identified as GB-2627, constructed in 1990, in series, and exhausting at one (1) stack, identified as Stack GB-2627.

- (g) One (1) scrubber liquor truck loading station, constructed in 1989, controlled by a carbon drum, identified as TF-2610 constructed in 2001.

- (h) ~~One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.~~

The system consisting of:

- (1) **One (1) reactor, identified as TP-2553, constructed in 1993, with a maximum capacity of 2,100 gallons.**
- (2) **One (1) reactor, identified as TR-2541, constructed in 2005, with a maximum capacity of 3,500 gallons.**
- (3) **Three (3) wash water tanks, identified as TP-2556, TP-2557, and TP-2558, constructed in 1996, each with a maximum capacity of 700 gallons.**

All controlled by one (1) caustic scrubber, identified as TP-2589, exhausting at Stack-2589.

- (i) ~~One (1) filter feed tank, identified as TP-2720, constructed in 1995, with a maximum capacity of 5,000 gallons, controlled by a carbon drum, identified as TF-2728 and exhausting at a stack identified as Stack TP-2728.~~

One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.

- (j) ~~One (1) filtrate tank, identified as TP-2730, constructed in 1995, with a maximum capacity~~

of 5,000 gallons.

One (1) PIB heat up tank, identified as TP02542, constructed in 2010, with a maximum capacity of 5,000 gallons.

- (k) ~~One (1) filter, identified as GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet of filter cake, and one (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet of filter cake, both controlled by a carbon drum, identified as TF-2728, exhausting at stack TF-2728.~~

One (1) overflow tank, identified as TP-2537, permitted in 2010, with a maximum capacity of 2,000 gallons.

- (l) ~~One (1) reactor, constructed in 1993, identified as TP-2553, with a maximum capacity of 2,100 gallons, controlled by scrubber TP-2589.~~

One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons, equipped with an integral multi-stage steam educator and condenser system followed by a carbon drum and one (1) emergency overflow tank, identified as TP-2760, permitted in 2010, with a maximum capacity of 1,300 gallons, and one (1) reactor, identified as TR-2016, constructed in 1990, with a maximum capacity of 4,000 gallons, with emissions controlled by a scrubber, TP-2072.

- (m) ~~One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.~~

The system consisting of:

- (1) **One (1) filter feed tank, identified as TP-2720, constructed in 1995, with maximum capacity of 5,000 gallons.**
- (2) **One (1) filter, identified at GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet per filter cake.**
- (3) **One (1) filter, identified as Gf-2734, constructed in 2005, with a maximum capacity of 41 cubic feet per filter cake.**
- (4) **One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.**
- (5) **One (1) flush tank, identified as TP-2726, constructed in 2010, with a maximum capacity of 1,300 gallons.**

All controlled by a carbon drum, identified as TF-2728, exhausting to Stack TF-2728.

- (n) ~~Three (3) wash water tanks, constructed in 1996, identified as TP-2556, TP-2557 and TP-2558, each with a maximum capacity of 700 gallons.~~

- (o) ~~One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons.~~

- (p) ~~One (1) reactor, constructed in 2005, identified as TR-2541, with a maximum capacity of 3,500 gallons, controlled by scrubber TP-2589.~~

- (n) **Two (2) filtrate tanks, identified as TP-2730 and TP-2732, constructed in 1995 and**

2010, respectively, with a maximum capacity of 12,500 gallons each.

- (o) Two (2) neutralization storage tanks, identified as TP-2538 and TP-2539, permitted in 2010, with a maximum capacity of 12,500 gallons, each.**
- (p) One (1) amine storage tank, identified as TS-2391, permitted in 2010, with a maximum capacity of 7,950 gallons.**

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

SECTION D.6 FACILITY OPERATION CONDITIONS

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

Miscellaneous Process - with a maximum rated capacity of 3,000 pounds per hour consisting of the following equipment:

- (w) Five (5) reactors, identified as TR-2224 (constructed in 1980), TR-2225 (constructed before 1976), TR-2226 (constructed before 1976), TR-2227 (constructed before 1976), and TR-2228 (constructed before 1976), and TR-2322 (constructed in 1984, maximum capacity of 5,500, 2,000, 7,000, 400, and 2000 and 7,500-gallons, respectively; controlled by two (2) wet scrubbers, identified as PE-2228, and TP-2332, and exhausting at stacks identified as Stack PE-2228, and Stack TP-2332.**
- (x) ~~Two (2)~~ One (1) reactors, identified as TR-2329 (constructed in 1986), and TR-2322 (constructed in 1984), maximum capacity of 1,500, and 2,000 gallons, respectively.**

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

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

- (y) Storage tanks emitting less than one (1) ton per year collectively of a combination of HAPs and less than fifteen (15) pounds per day of VOC. [326 IAC 12, and 40 CFR 60.112b(a)]**

~~(53) One (1) storage tank, maximum capacity of 3,450 gallons, identified as TS-2279, constructed before 1976.~~

~~(54) One (1) storage tank, maximum capacity of 3,450 gallons, identified as TS-2280, constructed before 1976.~~

- (60) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.**

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

SECTION E.1 FACILITY OPERATION CONDITIONS

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

Chlorination process with a nominal capacity of 3,000 pounds per hour of chlorine feed to produce short to long chain chlorination paraffins, olefins, waxes, polybutene, and 4,821 pounds per hour of muriatic acid. The chlorination system consists of the following systems:

(b) The system consisting of:

(2) ~~Five (5)~~ **Four (4)** reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), TR-2015 (constructed in 1990), ~~TR-2016 (constructed in 1990)~~, and TR-2017 (constructed in 1993), with a maximum capacity of 4,000 gallons each;

(6) One (1) acid tower, identified as CB-2060, constructed before 1976, with a maximum capacity of ~~8,035~~ **4,821** lb/hr muriatic acid;

(9) Two (2) chlorine vaporizers, identified as XV-2050 and XV-2051, constructed before 1976, and with a maximum feed capacity of 3,000 lb/hr chlorine combined

Hi-Temp process - with a maximum rated capacity of 4,200 pounds per hour of hi-temp products consisting of the following equipment:

(f) The system consisting of:

(1) One (1) reactor, identified as TR-2620, constructed in 1989, with a maximum capacity of 4,000 gallons;

(2) Two (2) recovered methanol tanks, identified as TS-2602 and TS-2603, constructed in 1989, with maximum capacity of 2,500, and 4,000 gallons, respectively;

(3) One (1) sludge tank, identified as TP-2604, constructed in 1989, with a maximum capacity of 750 gallons, equipped with a sludge drumming operation followed by an activated carbon filter for odor management;

(4) One (1) scrubber liquor tank, identified as TS-2610, constructed in 2001, with a maximum capacity of 10,000 gallons; and

(5) One (1) intermediate holding tank, identified as TP-2601, constructed in 1989, with a maximum capacity of 4,550 gallons;

all controlled by two (2) caustic scrubbers identified as TP-2624 and TP-2626, constructed in 1989; and one flare, identified as GB-2627, constructed in 1990, in series, and exhausting at one (1) stack, identified as Stack GB-2627.

(g) One (1) scrubber liquor truck loading station, constructed in 1989, controlled by a carbon drum, identified as TF-2610 constructed in 2001.

- (h) ~~One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.~~

The system consisting of:

- (1) **One (1) reactor, identified as TP-2553, constructed in 1993, with a maximum capacity of 2,100 gallons.**
- (2) **One (1) reactor, identified as TR-2541, constructed in 2005, with a maximum capacity of 3,500 gallons.**
- (3) **Three (3) wash water tanks, identified as TP-2556, TP-2557, and TP-2558, constructed in 1996, each with a maximum capacity of 700 gallons.**

All controlled by one (1) caustic scrubber, identified as TP-2589, exhausting at Stack-2589.

- (i) ~~One (1) filter feed tank, identified as TP-2720, constructed in 1995, with a maximum capacity of 5,000 gallons, controlled by a carbon drum, identified as TF-2728 and exhausting at a stack identified as Stack TP-2728.~~

One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.

- (j) ~~One (1) filtrate tank, identified as TP-2730, constructed in 1995, with a maximum capacity of 5,000 gallons.~~

One (1) PIB heat up tank, identified as TP02542, constructed in 2010, with a maximum capacity of 5,000 gallons.

- (k) ~~One (1) filter, identified as GF-2724, constructed in 1995, with a maximum capacity of 69 cubic feet of filter cake, and one (1) filter, identified as GF-2734, constructed in 2005, with a maximum capacity of 41 cubic feet of filter cake, both controlled by a carbon drum, identified as TF-2728, exhausting at stack TF-2728.~~

One (1) overflow tank, identified as TP-2537, permitted in 2010, with a maximum capacity of 2,000 gallons.

- (l) ~~One (1) reactor, constructed in 1993, identified as TP-2553, with a maximum capacity of 2,100 gallons, controlled by scrubber TP-2589.~~

One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons, equipped with an integral multi-stage steam educator and condenser system followed by a carbon drum and one (1) emergency overflow tank, identified as TP-2760, permitted in 2010, with a maximum capacity of 1,300 gallons, and one (1) reactor, identified as TR-2016, constructed in 1990, with a maximum capacity of 4,000 gallons, with emissions controlled by a scrubber, TP-2072.

- (m) ~~One (1) filter feed tank, constructed in 1993, identified as TP-2554, with a maximum capacity of 2,100 gallons.~~

The system consisting of:

- (1) **One (1) filter feed tank, identified as TP-2720, constructed in 1995, with maximum capacity of 5,000 gallons.**
- (2) **One (1) filter, identified at GF-2724, constructed in 1995, with a maximum**

capacity of 69 cubic feet per filter cake.

- (3) One (1) filter, identified as Gf-2734, constructed in 2005, with a maximum capacity of 41 cubic feet per filter cake.**
- (4) One (1) pre-coat tank, identified as TP-2722, constructed in 1995, with a maximum capacity of 1,300 gallons.**
- (5) One (1) flush tank, identified as TP-2726, constructed in 2010, with a maximum capacity of 1,300 gallons.**

All controlled by a carbon drum, identified as TF-2728, exhausting to Stack TF-2728.

- ~~(n) Three (3) wash water tanks, constructed in 1996, identified as TP-2556, TP-2557 and TP-2558, each with a maximum capacity of 700 gallons.~~
- ~~(o) One (1) reactor, constructed in 1990, identified as TR-2630, with a maximum capacity of 4,000 gallons.~~
- ~~(p) One (1) reactor, constructed in 2005, identified as TR-2541, with a maximum capacity of 3,500 gallons, controlled by scrubber TP-2589.~~
- (n) Two (2) filtrate tanks, identified as TP-2730 and TP-2732, constructed in 1995 and 2010, respectively, with a maximum capacity of 12,500 gallons each.**
- (o) Two (2) neutralization storage tanks, identified as TP-2538 and TP-2539, permitted in 2010, with a maximum capacity of 12,500 gallons, each.**
- (p) One (1) amine storage tank, identified as TS-2391, permitted in 2010, with a maximum capacity of 7,950 gallons.**

Miscellaneous Process - with a maximum rated capacity of 3,000 pounds per hour consisting of the following equipment:

- ~~(t) **Five Four (4)** reactors, identified as TR-2224 (constructed in 1980), TR-2225 (constructed before 1976), TR-2226 (constructed before 1976), **and** TR-2227 (constructed before 1976), ~~and TR-2228 (constructed before 1976)~~, maximum capacity of 5,500, 2,000, 7,000, **and** 400, ~~and 7,500~~-gallons, respectively; controlled by two (2) wet scrubbers, identified as PE-2228, and TP-2332, and exhausting at stacks identified as Stack PE-2228, and Stack TP-2332.~~
- ~~(u) Two (2) reactors, identified as TR-2329 (constructed in 1986), and TR-2322 (constructed in 1984), maximum capacity of 1,500, and 2,000 gallons, respectively.~~

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

Change No. 3

Section D.6 of the permit has been modified to remove references reactor TR-2228 because it has been removed from the source.

- D.6.1 Particulate Emission Limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations; modification by commissioner [326 IAC 6.8-1-2]

The particulate matter (PM) emissions from the emission units, identified as TR-2224, TR-2225, TR-2226, TR-2227, ~~TR-2228~~, TR-2329 and TR-2322 shall not exceed 0.03 grain per dry standard cubic foot, dscf, each.

Change No. 4

Section D.7 of the permit has been modified to remove references to tanks that have been removed from the source and to add references to the new tank, TS-2607.

D.7.1 Volatile Organic Liquid Storage Vessels [326 IAC 12][40 CFR 60, Part Kb]

Pursuant to 40 CFR 60.116b, the Permittee shall keep readily accessible records showing the dimensions of the storage tanks and an analysis showing the capacities of the following storage tanks.

(18) TS-2607
~~(18)~~**(19)TS-2613**

D.7.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the Permittee shall maintain a record and submit to Compliance Branch, OAQ, IDEM a report containing the following information:

- (a) The vessel identification number
- (b) The vessels dimension
- (c) The vessel capacity

for each of the following vessels.

~~(42) TS-2279~~
~~(43) TS-2280~~

Change No. 5

Preventative Maintenance Plan conditions have been added to the permit because the units and the control meet the specifications of units needing a preventative maintenance plan because the units use a control device to meet an emission limitation.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the chlorination process and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the sulfurization process and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventative maintenance plan required by this condition.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, is required for the Hi-Temp process and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Change No. 6

The description of the sulfurization process as well as associated limits in Conditions in D.3.2 and D.3.3 have been corrected to ensure practical enforceability. New compliance determination, record keeping, and reporting conditions have also been added for these new limits.

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

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

SECTION D.3 Sulfurization system

with a ~~maximum rated~~ **nominal** capacity of ~~8,450~~ **7000** pounds per hour of sulfurized products consisting of the following equipment:

SECTION D.3 FACILITY OPERATION CONDITIONS

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

Sulfurization process - with a ~~maximum rated~~ **nominal** capacity of ~~8,450~~ **7000** pounds per hour of sulfurized products consisting of the following equipment:

D.3.2 PSD Minor Limit [326 IAC 2-2]

~~The amount of sulfur used by the sulfurization process shall be limited to less than 10,335 tons per 12 consecutive month period with compliance determined at the end of each month. This usage limit and the scrubber's H₂S control efficiency of 99.9 percent is required to limit the hydrogen sulfide (H₂S) emissions to less than 10 tons per twelve (12) consecutive month period. If the monitoring data is not available or indicates the scrubber is not achieving this control efficiency, the Permittee shall use a control efficiency of zero percent (0%).~~

~~Compliance with this limit, will limit the H₂S emissions to less than 10 tons per year and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the sulfurization process.~~

H2S emissions from the sulfurization process shall not exceed ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit shall limit H2S emissions from the sulfurization process to less than ten (10) tons per year and shall render 326 IAC 2-2 not applicable to the sulfurization process

D.3.3 Emission Offset Minor Limit [326 IAC 2-3]

~~The amount of sulfurized products produced by the sulfurization process shall be limited to less than 37,000 tons per 12 consecutive month period with compliance determined at the end of each month and volatile organic compounds (VOC) emissions shall not exceed 0.000368 pounds of VOC per pound of finished sulfurization products.~~

~~Compliance with this limit, will limit the VOC emission from the sulfurization process to less than 25 tons per year and render the requirements of 326 IAC 2-3 (Emission Offset) not applicable to the sulfurization process.~~

VOC emissions from the sulfurization process shall not exceed twenty five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit shall limit VOC emissions from the sulfurization process to less than twenty five (25) tons per year and shall render 326 IAC 2-3 not applicable to the entire source.

Compliance Determination

D.3.6 H2S Emissions

Compliance with the limit in Condition D.3.2 shall be demonstrated using the following equation:

$$\text{H2S emissions (tons/month)} = T_{\text{sulfurized process}} * EF_{\text{sulfurH2S}} * 1 \text{ ton/2000 lbs}$$

Where

$T_{\text{sulfurization process}}$ = Throughput of sulfurized products to the sulfurization process (tons/month)

$EF_{\text{sulfurH2S}}$ = 1.936 lbs of VOC per ton of sulfur processed (or an emission factor determined by the most recent valid compliance demonstration)

D.3.7 VOC Emissions

Compliance with the limit in Condition D.2.4 shall be demonstrated using the following equation:

$$\text{VOC emissions (tons/month)} = T_{\text{sulfurization products processed}} * EF_{\text{sulfurVOC}} * 1 \text{ ton/2000 lbs}$$

Where

$T_{\text{sulfurization products}}$ = Throughput of sulfurized products to the sulfurization process (tons/month)

$EF_{\text{sulfurVOC}}$ = 0.736 lbs of H2S per ton of sulfurized product processed (or an emission factor determined by the most recent valid compliance demonstration)

D.3.409 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

- (a) ~~Before June 12, 2014,~~ **Within 180 days of issuance of this permit,** the Permittee shall conduct a **H2S** performance test ~~to verify the H2S emission factor~~ as per condition D.3.6 and establish the caustic concentration (% by weight), hourly average operating temperature and minimum liquid circulation volume in the second stage sulfurization scrubber using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) **Within 180 days of issuance of this permit, the Permittee shall conduct a VOC performance test as per condition D.3.7 and establish the caustic concentration (% by weight), hourly average operating temperature and minimum liquid circulation volume in the second stage sulfurization scrubber using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.**

D.3.11 Record Keeping Requirements

- (a) To document the compliance status with Conditions 3.2, 3.3, 3.5, and 3.6, the Permittee shall maintain records of:

- (1) The amount of sulfur used and sulfurization products manufactured for each month.
 - (2) **To document the compliance status with Condition D.3.2, the Permittee shall maintain record of H2S emission calculations performed using the equation found in Condition D.3.6**
 - (3) **To document the compliance status with Condition D.3.3, the Permittee shall maintain record of VOC emission calculations performed using the equation found in Condition D.3.7**
 - (4) The hourly average operating temperature of the second stage of the scrubber.
 - (5) Records of the per day caustic concentration and per hour liquid flow rate in second stage of the scrubber.
 - (6) Per day records of the caustic concentration in the first stage of the scrubber.
 - (7) Daily volume and caustic concentration charged to the scrubbers during recharge.
- (b) Pursuant to 326 IAC 8-9-6, the Permittee shall keep readily accessible records of each storage tank listed in Condition D.3.4 for the life of the tank.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 089-29495-00227 Significant Permit Modification No. 089-29496-00227. The staff recommend to the Commissioner that this Part 70 significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jillian Bertram 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)233-1782 or toll free at 1-800-451-6027 extension 3-1782.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emissions Calculations
Modification Summary**

Company Name: Dover Chemical - Hammond Works
Address City IN Zip: 3000 Sheffield Ave. Hammond, IN 46327
Permit Number: T089-29495-00227
Reviewer: Jillian Bertram
Date: July 26, 2010

Emission Source	Unrestricted Emissions (tons/yr)								Total HAP
	PM	PM10	PM2.5	SO2	VOC	CO	NOx	Single HAP	
New Products									
Doverlube PE80	0.000	0.000	0.000	0.000	0.429	0.000	0.000	0.000	0.000
Doverlube NCEP	0.000	0.000	0.000	0.000	0.025	0.000	0.000	0.000	0.000
Milidin GX-3 / Doverlube B902 *	0.000	0.000	0.000	0.000	10.814	0.000	0.000	0.001	0.001
Tanks									
TS-2391 **	0.000	0.000	0.000	0.000	0.040	0.000	0.000	0.000	0.000
TP-2607 **	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.000
TP-2542 ***	0.000	0.000	0.000	0.000		0.000	0.000		
TP-2726 ***	0.000	0.000	0.000	0.000		0.000	0.000		
TP-2537 **	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000
TP-2538 ****	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP-2539 ****	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP-2760 ****	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sulfurization Reactor	0.000	0.000	0.000	0.000	10.477	0.000	0.000	1480.440	1480.440
PIBSA	0.000	0.000	0.000	0.000	11.214	0.000	0.000	0.090	0.090
Total	0.000	0.000	0.000	0.000	33.023	0.000	0.000	1480.440	1480.531

* Milidin GX-3 and Doverlube B902 are made in the same reactor, therefore, emissions are worst-case for each pollutant

** Tank emissions are calculated by the source using TANKS 4.0

*** VOC and HAP emissions are included in the PIBSA modification calculations

**** The tank will not store liquids containing VOCs or HAPs

**Appendix A: Emissions Calculations
New Products**

Company Name: Dover Chemical - Hammond Works
Address City IN Zip: 3000 Sheffield Ave. Hammond, IN 46327
Permit Number: T089-29495-00227
Reviewer: Jillian Bertram
Date: July 26, 2010

New Products to be Manufactured in Existing Equipment

Doverlube PE80

Manufactured in Hi-Temp. (TR-2620) and controlled by scrubbers (TP-2624 &TP-2626) and flare (GB-2627)

Step	Time per batch (hours) ¹	VOC		HAP	HAP		Total time per batch (hours)	Potential Batches per Year	PTE uncontrolled VOC (TPY)	PTE uncontrolled HAP (TPY)
		Emission factor (lb/hr)	Emissions (lb/batch)		Emission Factor (lb/hr)	Emissions (lb/batch)				
Charging		0.01	0.00		0.00	0.00	48.00	183	0.43	0.00
Reaction	12.00	0.21	2.47							
Mix & Cool	24.00	0.09	2.24							
Total			4.71							

Doverlube NCEP

Manufactured in Chlorination reactor due to need for Caustic scrubber but is a fuel additive product (TR-2010) and controlled by scrubbers (TP-2061, TP-2062, TP-2063 and TP_2064)

Step	Time per batch (hours) ¹	VOC		HAP	HAP		Total time per batch (hours)	Potential Batches per Year	PTE uncontrolled VOC (TPY)	PTE uncontrolled HAP (TPY)
		Emission factor (lb/hr)	Emissions (lb/batch)		Emission Factor (lb/hr)	Emissions (lb/batch)				
Charging	1.00	0.00	0.00		0.00	0.00	48.00	183	0.02	0.00
Reaction	14.00	0.01	0.10							
Mix & Cool	24.00	0.01	0.17							
Total			0.27							

Milidin GX-3

Manufactured in Misc. (TR-2224 & TR-2322) and controlled by scrubbers (PE-2228 &TP-2332)

Step	Time per batch (hours) ¹	VOC		HAP	HAP		Total time per batch (hours)	Potential Batches per Year	PTE uncontrolled VOC (TPY)	PTE uncontrolled HAP (TPY)
		Emission factor (lb/hr)	Emissions (lb/batch)		Emission Factor (lb/hr)	Emissions (lb/batch)				
Charging		0.69	0.00		Controlled	Controlled	96.00	91	9.56	
Reaction	48.00	2.91	139.66	Formald	0.00	0.02				0.00
Mix & Cool	24.00	2.91	69.83	ehyde						
Total			209.49							

Uncontrolled emissions are conservatively assumed at the worst case which is back calculated from the controlled emissions represented a scrubber with the highest control efficiency

Doverlube B902

Manufactured in Misc (TR-2224 & TR-2322) and controlled by scrubbers (PE-2228 &TP-2332)

Step	Time per batch (hours) ¹	VOC		HAP	HAP		Total time per batch (hours)	Potential Batches per Year	PTE uncontrolled VOC (TPY)	PTE uncontrolled HAP (TPY)
		Emission factor (lb/hr)	Emissions (lb/batch)		Emission Factor (lb/hr)	Emissions (lb/batch)				
Charging		0.00	0.00		0.00	0.00	72.00	122	10.81	0.00
Reaction	3.00	46.92	140.77							
Mix & Cool	24.00	1.54	36.99							

total per batch 177.76

Total PTE of new products

11.27

0.00 TPY HAP uncontrolled

Note that the Milidin GX-3 and the Doverlube B902 utilize the same reactors. Therefore the PTE for these products is not additive.

**Appendix A: Emissions Calculations
Sulfurization Tank**

Company Name: Dover Chemical - Hammond Works
Address City IN Zip: 3000 Sheffield Ave. Hammond, IN 46327
Permit Number: T089-29495-00227
Reviewer: Jillian Bertram
Date: July 26, 2010

	Volume (gallons)	Capacity (lb/batch)	Rate (batch/day)	VOC EF (lb/lb)	VOC (tons/yr)	H2S EF (tons/ton)	H2S (tons/yr)
TR-2128	7500	52000	3	0.000368	10.47696	0.052	1480.44

Methodology

Capacity (lb/hr) = Capacity of All Tanks (lb/hr) * Volume of TR-2128 (gallons) / Volume of All Tanks (gallons) (gallons)*1/2000(lb/ton)

Uncontrolled VOC emission factor for the existing tanks, from current permit

VOC (tons/yr) = VOC EF (lb/lb) * Capacity (lb/hr) * 8760 (hr/yr) * 1/2000 (lb/ton)

Uncontrolled H2S emission factor back calculated from existing H2S limit and scrubber percent control

H2S Emissions (tons/yr) = Capacity (lb/hr) * 1/2000 (lb/ton) * H2S EF (tons/ton) * 8760 (hr/yr)

Reflux Condensers are integral to the process

**Appendix A: Emissions Calculations
PIBSA- SNO**

Company Name: Dover Chemical - Hammond Works
Address City IN Zip: 3000 Sheffield Ave. Hammond, IN 46327
Permit Number: T089-29495-00227
Reviewer: Jillian Bertram
Date: July 26, 2010

	Oil Vented per Cleanout (lbs/cleanout)				VOC
	Pre-Coat Blow Out	Filter Blow and Burst	Final Filter Blow	Cleanouts /year	(tons/yr)
PIBSA Filtration	2.67E-05	1.91E+01	4.83E+01	224.60	7.56

Oil vented per cleanout is calculated by source based on oil concentration and gas volume

VOC (tons/yr) = (Pre-Coat Blow out (lbs/cleanout) + Filter Blow and Burst (lbs/cleanout) + Final Filter Blow (lbs/cleanout)) * Cleanouts/year * 1 ton/ 2000 lbs

	Nitrogen Blanket Flow Rate (SCF/hr)	Oil Concentration (lbs/SCF)	VOC (tons/yr)
Tank Breathing	30	0.008044	1.06

Oil concentration provided by source, calculated from vapor pressure

VOC (tons/yr) = Nitrogen Blanket Flow Rate (SCF/hr) * Oil Concentration (lbs/SCF) * 8760 (hr/yr) * 1/2000 (tons/lb)

	Batches/yr	Displacement (lbs/batch)	VOC (tons/yr)
Oil Storage Tanks	673.8	0.00001048	3.531E-06

Batches/yr is provided by the source and based on hours per batch

Displacement per Batch is provided by the source

VOC (tons/yr) = Batches/yr * Displacement (lbs/batch) * 1/2000 (lb/ton)

**Appendix A: Emissions Calculations
PIBSA- SNO**

Company Name: Dover Chemical - Hammond Works
Address City IN Zip: 3000 Sheffield Ave. Hammond, IN 46327
Permit Number: T089-29495-00227
Reviewer: Jillian Bertram
Date: July 26, 2010

	Batches/yr	Displacement (lbs/batch)	VOC (tons/yr)
T-2720 to T-2730 Transfer	673.8	4.193	1.4126217

Batches/yr is provided by the source and based on hours per batch
 Displacement per Batch is provided by the souce
 $\text{VOC (tons/yr)} = \text{Batches/yr} * \text{Displacement (lbs/batch)} * 1/2000 \text{ (lb/ton)}$

	Batches/yr	Displacement (lbs/batch)	VOC (tons/yr)
Filter Pre-Coat and Cake Flush	673.8	3.50538	1.1809625

Batches/yr is provided by the source and based on hours per batch
 Displacement per Batch is provided by the souce
 $\text{VOC (tons/yr)} = \text{Batches/yr} * \text{Displacement (lbs/batch)} * 1/2000 \text{ (lb/ton)}$

Emission Point	VOC (tons/yr)
PIBSA Filtration	7.56
Tank Breathing	1.06
Oil Storage Tanks	3.53071E-06
T-2720 to T-2730 Transfer	1.4126217
Filter Pre-coat and Cake Flush	1.180962522
Total PIBSA Process	11.21



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

December 7, 2010

TO: Hammond Public Library

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

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

Applicant Name: Dover Chemical – Hammond Works
Permit Number: 089-29495-00227

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

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

Enclosures
Final Library.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Mark Renick
Dover Chemical - Hammond Works
3000 Sheffield Ave
Hammond, IN 46327

DATE: December 7, 2010

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

SUBJECT: Final Decision
Part 70 SSM
089-29495-00227

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

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

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

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

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 12/7/2010 Dover Chemical - Hammond Works 089-29495-00227 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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		Mark Renick Dover Chemical - Hammond Works 3000 Sheffield Ave Hammond IN 46327 (Source CAATS)									
2		Scott Magee Ops Mgr Dover Chemical - Hammond Works 3000 Sheffield Ave Hammond IN 46327 (RO CAATS)									
3		Mr. Terrance Wagner 726 First Street Crete IL 60417 (Affected Party)									
4		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Official)									
5		Gary - Hobart Water Corp 650 Madison St, P.O. Box M486 Gary IN 46401-0486 (Affected Party)									
6		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health Department)									
7		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)									
8		Hammond City Council and Mayors Office 5925 Calumet Avenue Hammond IN 46320 (Local Official)									
9		Hammond Public Library 564 State St Hammond IN 46320-1532 (Library)									
10		Mr. Peter Engelbert 7542 New Hampshire Avenue Hammond IN 46323 (Affected Party)									
11		Dennis Jancosek 234 Oakwood Street Hammond IN 46324 (Affected Party)									
12		Mr. Wayne Sandefur 1231 177th Place Hammond IN 46324 (Affected Party)									
13		Mr. Bill Simmons 6326 Van Buren Avenue Hammond IN 46324 (Affected Party)									
14		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)									
15		Ms. Dorothy Alabach 647 North 125 West Valparaiso IN 46385 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--

Mail Code 61-53

IDEM Staff	CDENNY 12/7/2010 Dover Chemical - Hammond Works 089-29495-00227 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

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		Shawn 3229 E. Atlanta Court Portage IN 46368 (Affected Party)										
2		Ms. Nancy Orlando 1947 Wespark Avenue Whiting IN 46394 (Affected Party)										
3		Mr. J. Rogina 2718 White Oak Avenue Whiting IN 46394 (Affected Party)										
4		D. Atteberry 2701 Achrage Whiting IN 46394 (Affected Party)										
5		Mr. Ed Dybel 2440 Schrage Avenue Whiting IN 46394 (Affected Party)										
6		Mr. Steve Zabroski PO Box 524 Whiting IN 46394 (Affected Party)										
7		Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 (Affected Party)										
8		Mr. Robert Binder 7608 West 163 Street Tinley Park IL 60477 (Affected Party)										
9		Mark Coleman 9 Locust Place Ogden Dunes IN 46368 (Affected Party)										
10		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)										
11		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
12		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
13		Ms. Christa O. Russell Schreiber Yonley and Assc. 5829 Haverford Avenue Indianapolis IN 46220 (Consultant)										
14		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										
15		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--

Mail Code 61-53

IDEM Staff	CDENNY 12/7/2010 Dover Chemical - Hammond Works 089-29495-00227 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:	CERTIFICATE OF MAILING ONLY

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		Robert 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)										
2		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)										
3		Calumet Township Trustee 31 E 5th Avenue Gary IN 46402 (Affected Party)										
4		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)										
5		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)										
6		Ron Novak Hammond Dept. of Environmental Management 5925 Calumnet Ave. Hammond IN 46320 (Local Official)										
7		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)										
8		Gitte Laasby Post Tribune 1433 E. 83rd Ave Merrillville IN 46410 (Affected Party)										
9		Susan Severtson City of Gary Law Dept. 401 Broadway 4th Floor Gary IN 46402 (Local Official)										
10		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--