



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: March 26, 2013

RE: Dover Chemical – Hammond Works / 089-32930-00227

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

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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 from 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-AM.dot12/3/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mr. Mark Renick
Dover Chemical Corporation - Hammond Works
3000 Sheffield Ave
Hammond, IN 46327

March 26, 2013

Re: 089-32930-00227
Administrative Amendment to
Part 70 Operating Permit T089-26668-00227

Dear Mr. Renick:

On March 8, 2013, the Office of Air Quality (OAQ) received an application from Dover Chemical Corporation - Hammond Works to administratively amend their existing Title V operating permit T089-26668-00227, issued on December 10, 2008.

Dover Chemical Corporation - Hammond Works Corporation submitted an Administrative application relating to the addition of insignificant emission units and to manufacture new products.

Pursuant to the provisions of 326 IAC 2-7-11(a)(7) and (8)(B), an Administrative Amendment is hereby approved as described in the attached Administrative Amendment letter. Please find enclosed the entire amended permit document for final issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Josiah Balogun at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5257 or toll free at 1-800-451-6027 extension 4-5257.

Sincerely,

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

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Air Compliance and Enforcement Branch



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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

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

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. 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 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

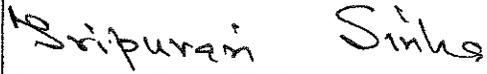
Operation Permit Renewal No.: 089-26668-00227	
Issued by/Signed by: Tripurari P. Sinha, Ph. D, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 10, 2008 Expiration Date: December 10, 2013
Administrative Amendment No. 089-28490-00227, issued on September 25, 2009; Administrative Amendment No. 089-29282-00227, issued on July 9, 2010; Significant Permit Modification No. 089-29496-00227, issued on December 27, 2010; Administrative Amendment No. 089-30010-00227, issued on January 05, 2011; and Administrative Amendment No. 089-30584-00227, issued on July 22, 2011.	
Administrative Amendment No.: 089-32930-00227	
Issued by:  Tripurari P. Sinha, Ph. D, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 26, 2013 Expiration Date: December 10, 2013

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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 Ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under Emission Offset Rules 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 3,000pounds 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) Seven (7) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2007(constructed in 1977), TR-2008 (constructed in 1977) and TR-2010 (constructed in 1983), with a maximum capacity of 2,000 gallons each;
- (2) Three (3) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), 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) Two (2) sulfurization reactors, identified as TR-2120, and TR-2123, constructed before 1976, with maximum capacity of 3,700, and 7,500 gallons, respectively, and one (1) sulfurization reactor identified as TR-2128, constructed in 2012, 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, 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.
- (q) Three (3) reactors, identified as TR-2006 (constructed before 1976), TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each, and TR-2015 (constructed in 1990), with a maximum capacity of 4,000 gallons.

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

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:

- (r) 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:

- (s) Four (4) reactors, identified as TR-2224 (constructed in 1980), 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.
- (t) 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

- (a) 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) 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.
- (27) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1033, constructed in 1986.
- (28) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1039, constructed in 1987.
- (29) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1040, constructed in 1987.
- (30) One (1) storage tank, maximum capacity of 15,540 gallons, identified as TS-1042, constructed in 1989.
- (31) One (1) storage or blend tank, maximum capacity of 14,900 gallons, identified as TS-1043, constructed in 1990.
- (32) One (1) wax storage tank, maximum capacity of 20,390 gallons, identified as TS-1056, constructed in 1978.
- (33) One (1) storage tank, maximum capacity of 20,390 gallons, identified as TS-1057, constructed in 1978.
- (34) One (1) storage tank, maximum capacity of 4,010 gallons, identified as TS-1081, constructed in 1989.
- (35) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1082, constructed in 1989.
- (36) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2160, constructed before 1976.
- (37) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2163, constructed before 1976.
- (38) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2168, constructed before 1976.
- (39) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2169, constructed before 1976.
- (40) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2170, constructed before 1976.
- (41) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2178, constructed in 1998.
- (42) One (1) storage tank, maximum capacity of 2,600 gallons, identified as TS-2209, constructed before 1979.
- (43) One (1) storage tank, maximum capacity of 10,800 gallons, identified as TS-2218, constructed before 1979.

- (44) One (1) storage tank, maximum capacity of 10,690 gallons, identified as TS-2252, constructed prior to 1976.
- (45) One (1) storage tank, maximum capacity of 6,760 gallons, identified as TS-2253, constructed before 1976.
- (46) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2255, constructed before 1976.
- (47) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2264, constructed before 1979.
- (48) One (1) storage tank, maximum capacity of 31,070 gallons, identified as TS-2265, constructed before 1979.
- (49) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2271, constructed in 2005.
- (50) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2272, constructed in 2005.
- (51) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2275, constructed before 1979.
- (52) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2276, constructed before 1979.
- (53) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2277, constructed before 1976.
- (54) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2605, constructed in 1990.
- (55) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2315, constructed in 1990.
- (56) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2362, constructed in 1990.
- (57) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2364, constructed in 1990.
- (58) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2365, constructed in 1990.
- (59) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2367, constructed in 1990.
- (60) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2606, constructed in 1989.
- (61) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.
- (62) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2611, constructed in 1990.
- (63) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2612, constructed in 1990.

- (64) One (1) storage tank, maximum capacity of 30,080 gallons, identified as TS-2613, constructed in 1990.
- (65) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2618, constructed in 1990.
- (66) One (1) storage tank, maximum capacity of 16,920 gallons, identified as TS-2619, constructed in 1990.
- (67) 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.
- (68) 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.
- (69) 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

- (b) 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.
- (c) Wastewater treatment plant air strippers.
- (d) Two (2) parts washers, identified as PW-1M and PW-2L, constructed in 2005, with a rated capacity of 40 gallons.

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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

- (1) Identification of the individual(s) 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 no later than 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

no later than two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible

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

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

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

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

This permit shield does not extend to applicable requirements, which are promulgated after the date of issuance of this permit, unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

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

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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the reasonable 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 a certification that meets the requirements of 326 IAC 2-7-6910 by a “responsible official” as defined by 326 IAC 2-7-1(34).

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

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

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

B.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 that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

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

The notification which shall be submitted by the Permittee does require a certification that 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 no later than 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.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) Seven (7) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977) and TR-2010 (constructed in 1983), with a maximum capacity of 2,000 gallons each;
- (2) Three (3) 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) In order to document the compliance status 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) Two (2) sulfurization reactors, identified as TR-2120, and TR-2123, constructed before 1976, with maximum capacity of 3,700, and 7,500 gallons, respectively, and one (1) sulfurization reactor. Identified as TR-2128, constructed in 2012, 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, 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:

$$\text{H}_2\text{S emissions (tons/month)} = T_{\text{sulfurization process}} * \text{EF}_{\text{sulfurH}_2\text{S}} * 1 \text{ ton}/2000 \text{ lbs}$$

Where

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

$\text{EF}_{\text{sulfurH}_2\text{S}}$ = 1.936 lbs of H₂S 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.3.3 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

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

$\text{EF}_{\text{sulfurVOC}}$ = 0.736 lbs of VOC per ton of sulfur processed (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) In order to demonstrate the compliance status with Condition D.3.2 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup of reactor TR-2128, 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.
- (b) In order to demonstrate the compliance status with Condition D.3.2 and within sixty (60) days of reaching maximum capacity but no later than one hundred and eighty (180) days after initial startup of reactor TR-2128, 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) In order to document the compliance status with Conditions D.3.2, D.3.3, D.3.5, and D.3.6, the Permittee shall maintain records of:
 - (1) The amount of sulfur used and sulfurization products manufactured for each month.
 - (2) In order 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) In order 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

A quarterly summary of the information to document the compliance status with Conditions D.3.2 and D.3.3 shall be submitted to the address listed in Section C- General Reporting Requirements, of this permit, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(34)

SECTION D.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.
- (q) Three (3) reactors, identified as TR-2006 (constructed before 1976), TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each, and TR-2015 (constructed in 1990), with a maximum capacity of 4,000 gallons.

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

(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, dsfc, 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:

- (r) 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-2226 (constructed before 1976), TR-2227 (constructed before 1976), and TR-2322 (constructed in 1984), maximum capacity of 5,500, 2,000, 7,000, and 2,000 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) One (1) reactor, identified as TR-2329 (constructed in 1986), 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.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-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

- (a) 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) tank, identified as TS-1027, constructed in 1985, maximum capacity of 14,930 gallons, controlled by a carbon adsorption drum, identified as Stack TF-1027.
- (27) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1033, constructed in 1986.
- (28) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1039, constructed in 1987.
- (29) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1040, constructed in 1987.
- (30) One (1) storage tank, maximum capacity of 15,540 gallons, identified as TS-1042, constructed in 1989.
- (31) One (1) storage or blend tank, maximum capacity of 14,900 gallons, identified as TS-1043, constructed in 1990.
- (32) One (1) wax storage tank, maximum capacity of 20,390 gallons, identified as TS-1056, constructed in 1978.
- (33) One (1) storage tank, maximum capacity of 20,390 gallons, identified as TS-1057, constructed in 1978.
- (34) One (1) storage tank, maximum capacity of 4,010 gallons, identified as TS-1081, constructed in 1989.
- (35) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1082, constructed in 1989.
- (36) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2160, constructed before 1976.

- (37) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2163, constructed before 1976.
- (38) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2168, constructed before 1976.
- (39) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2169, constructed before 1976.
- (40) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2170, constructed before 1976.
- (41) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2178, constructed in 1998.
- (42) One (1) storage tank, maximum capacity of 2,600 gallons, identified as TS-2209, constructed before 1979.
- (43) One (1) storage tank, maximum capacity of 10,800 gallons, identified as TS-2218, constructed before 1979.
- (44) One (1) storage tank, maximum capacity of 10,690 gallons, identified as TS-2252, constructed prior to 1976.
- (45) One (1) storage tank, maximum capacity of 6,760 gallons, identified as TS-2253, constructed before 1976.
- (46) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2255, constructed before 1976.
- (47) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2264, constructed before 1979.
- (48) One (1) storage tank, maximum capacity of 31,070 gallons, identified as TS-2265, constructed before 1979.
- (49) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2271, constructed in 2005.
- (50) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2272, constructed in 2005.
- (51) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2275, constructed before 1979.
- (52) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2276, constructed before 1979.
- (53) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2277, constructed before 1976.
- (54) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2605, constructed in 1990.
- (55) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2315, constructed in 1990.
- (56) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2362, constructed in 1990.

- (57) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2364, constructed in 1990.
- (58) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2365, constructed in 1990.
- (59) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2367, constructed in 1990.
- (60) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2606, constructed in 1989.
- (61) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.
- (62) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2611, constructed in 1990.
- (63) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2612, constructed in 1990.
- (64) One (1) storage tank, maximum capacity of 30,080 gallons, identified as TS-2613, constructed in 1990.
- (65) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2618, constructed in 1990.
- (66) One (1) storage tank, maximum capacity of 16,920 gallons, identified as TS-2619, constructed in 1990.
- (67) 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.
- (69) 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) TS-1027
- (17) TP-1033
- (18) TS-1039
- (19) TS-1040
- (20) TS-1042
- (21) TS-1043
- (22) TS-1056
- (23) TS-1057
- (24) TS-1081
- (25) TS-1082
- (26) TS-2160
- (27) TS-2163
- (28) TS-2168
- (29) TS-2169
- (30) TS-2170
- (31) TS-2209
- (32) TS-2218
- (33) TS-2252
- (34) TS-2253

- (35) TS-2255
- (36) TS-2264
- (37) TS-2265
- (38) TS-2271
- (39) TS-2272
- (40) TS-2275
- (41) TS-2276
- (42) TS-2277
- (43) TS-2605
- (44) TS-2611
- (45) TS-2612
- (46) TS-2618
- (47) TS-2619
- (48) TP-2550
- (49) TP-2551
- (50) 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:

- (b) 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.
- (c) Wastewater treatment plant air strippers.
- (d) Two (2) parts washers, identified as PW-1M and PW-2L, constructed in 2005, with a rated capacity of 40 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.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.

D.8.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

- (a) Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) The Permittee shall ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

- (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
- (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
- (3) If used, solvent spray:
- (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

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) Seven (7) reactors, identified as TR-2001 (constructed before 1976), TR-2003 (constructed before 1976), TR-2004 (constructed before 1976), TR-2005 (constructed before 1976), TR-2007 (constructed in 1977), TR-2008 (constructed in 1977), and TR-2010 (constructed in 1983), with a maximum capacity of 2,000 gallons each;
 - (2) Three (3) reactors, identified as TR-2002 (constructed in 1988), TR-2009 (constructed in 1982), 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.

- (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.
- (q) Three (3) reactors, identified as TR-2006 (constructed before 1976), TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each, and TR-2015 (constructed in 1990), with a maximum capacity of 4,000 gallons.

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

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:

- (r) 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:

- (s) Four (4) reactors, identified as TR-2224 (constructed in 1980), TR-2226 (constructed before 1976), TR-2227 (constructed before 1976), and TR-2228 (constructed before 1976), maximum capacity of 5,500, 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.
- (t) One (1) reactors, identified as TR-2329 (constructed in 1986), 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)]

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 the compliance status 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), no later than four (4) daytime 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 no later than 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: _____

**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: 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: _____

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

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

Source Name: 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: _____

Attachment A to a Part 70 Operating Permit

Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 [40 CFR Part 60, Subpart Kb] [326 IAC 12]

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
Administrative Amendment No.:	089-32930-00227
Permit Reviewer:	Josiah Balogun

Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Source: 52 FR 11429, Apr. 8, 1987, unless otherwise noted.

§ 60.110b Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

(c) [Reserved]

(d) This subpart does not apply to the following:

- (1) Vessels at coke oven by-product plants.
- (2) Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.
- (3) Vessels permanently attached to mobile vehicles such as trucks, railcars, barges, or ships.
- (4) Vessels with a design capacity less than or equal to 1,589.874 m^3 used for petroleum or condensate stored, processed, or treated prior to custody transfer.
- (5) Vessels located at bulk gasoline plants.
- (6) Storage vessels located at gasoline service stations.
- (7) Vessels used to store beverage alcohol.

(8) Vessels subject to subpart GGGG of 40 CFR part 63.

(e) *Alternative means of compliance* —(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR part 65, subpart C, the monitoring requirements of §60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) A storage vessel with a design capacity greater than or equal to 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa; or

(ii) A storage vessel with a design capacity greater than 75 m³ but less than 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

(3) *Internal floating roof report.* If an owner or operator installs an internal floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.43. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

(4) *External floating roof report.* If an owner or operator installs an external floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.44. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 78275, Dec. 14, 2000; 68 FR 59332, Oct. 15, 2003]

§ 60.111b Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this subpart as follows:

Bulk gasoline plant means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal requirement or Federal, State or local law, and discoverable by the Administrator and any other person.

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

Custody transfer means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

Fill means the introduction of VOL into a storage vessel but not necessarily to complete capacity.

Gasoline service station means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the volatile organic compounds (as defined in 40 CFR 51.100) in the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOL's stored above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for VOL's stored at the ambient temperature, as determined:

- (1) In accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference—see §60.17); or
- (2) As obtained from standard reference texts; or
- (3) As determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17);
- (4) Any other method approved by the Administrator.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Petroleum liquids means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

Process tank means a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.

Reid vapor pressure means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).

Storage vessel means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:

- (1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;
- (2) Subsurface caverns or porous rock reservoirs; or
- (3) Process tanks.

Volatile organic liquid (VOL) means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.

Waste means any liquid resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 61756, Oct. 17, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.112b Standard for volatile organic compounds (VOC).

- (a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ containing a VOL that, as

stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

(ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114b of this subpart.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m³ which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in §60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in §60.114b of this subpart.

(c) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(1) For any storage vessel that otherwise would be subject to the control technology requirements of paragraphs (a) or (b) of this section, the site shall have the option of either complying directly with the requirements of this subpart, or reducing the site-wide total criteria pollutant emissions cap (total emissions cap) in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the total emissions cap in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this subpart for such storage vessel.

(2) For any storage vessel at the site not subject to the requirements of 40 CFR 60.112b (a) or (b), the requirements of 40 CFR 60.116b (b) and (c) and the General Provisions (subpart A of this part) shall not apply.

[52 FR 11429, Apr. 8, 1987, as amended at 62 FR 52641, Oct. 8, 1997]

§ 60.113b Testing and procedures.

The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.

(a) After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(b) After installing the control equipment required to meet §60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

(i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

(ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.

(iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section:

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in paragraph (b)(1) of §60.113b(b) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

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

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989]

§ 60.114b *Alternative means of emission limitation.*

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

§ 60.115b Reporting and recordkeeping requirements.

The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.

(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §60.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), furnish the Administrator with a report that contains:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

- (i) The date of measurement.
- (ii) The raw data obtained in the measurement.
- (iii) The calculations described in §60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

(c) After installing control equipment in accordance with §60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

- (1) A copy of the operating plan.
- (2) A record of the measured values of the parameters monitored in accordance with §60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with §60.112b, the owner or operator shall meet the following requirements.

- (1) A report containing the measurements required by §60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.
- (2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.
- (3) Semiannual reports of all periods recorded under §60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

§ 60.116b *Monitoring of operations.*

(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or

(ii) ASTM D323–82 or 94 (incorporated by reference—see §60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

[52 FR 11429, Apr. 8, 1987, as amended at 65 FR 61756, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.117b Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

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

Technical Support Document (TSD) for a Part 70 Administrative
Amendment

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
Administrative Amendment No.:	089-32930-00227
Permit Reviewer:	Josiah Balogun

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;
- (b) Administrative Amendment No. 089-29282-00227, issued on July 9, 2010;
- (c) Interim No. 089-29495i, issued on September 30, 2010;
- (d) Significant Source Modification No. 089-29495-00227, issued on December 07, 2010;
- (e) Significant Permit Modification No. 089-29496-00227, issued on December 27, 2010;
- (f) Administrative Amendment No. 089-30010-00227, issued on January 05, 2011;
- (g) Administrative Amendment No. 089-30584-00227, issued on July 22, 2011; and
- (h) Significant Permit Modification No. 089-31105-00227, issued on February 27, 2012.

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	On June 11, 2012, the U.S. EPA designated Lake County nonattainment, for the 8-hour ozone standard.
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.

Pollutant	Designation
Pb	Not designated.
Unclassifiable or attainment effective February 6, 2012, for PM _{2.5} .	

- (a) **Ozone Standards**
 U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake County as nonattainment for ozone. On August 1, 2012 the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective, August 9, 2012. IDEM, does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against US EPA in the US Court of Appeals for the DC Circuit on July 19, 2012. 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 designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO_x emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (b) **PM_{2.5}**
 Lake County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5}, NO_x and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. 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
GHGs as CO ₂ e	30558

Pollutant	Emissions (ton/yr)
HAPs	
Single HAP	< 10
Total HAPs	< 25

- (a) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because VOC, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.
- (b) This existing source is not major stationary source, under PSD (326 IAC 2-2), because the emissions of GHGs are less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) 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).
- (d) These emissions are based upon Significant Permit Modification No. 089-31105-00227 issued on February 27, 2012.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Dover Chemical Corp. - Hammond Works on March 8, 2013, relating to addition of insignificant emission units and to manufacture new products. The following are the list of the proposed emission unit(s):

- (a) One (1) 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.
- (b) Wastewater treatment plant air strippers
- (c) Two (2) parts washers, identified as PW-1M and PW-2L, constructed in 2005 , with a rated capacity of 40 gallons

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.

Increase in PTE Before Controls of the Modification	
Pollutant	Potential To Emit (ton/yr)
PM	--
PM ₁₀	--
PM _{2.5}	--
SO ₂	--
VOC	6.59
CO	--
NO _x	--
Single HAPs	<10
Total HAPs	<25

This source modification is not subject to 326 IAC 2-7-10.5. Additionally, the modification will be incorporated into the Part 70 Operating Permit through an administrative amendment issued pursuant to 326 IAC 2-7-11(a)(7) and (8)(B) because this amendment is revising descriptive information and adding insignificant emission units to the permit .

Permit Level Determination –Emission Offset

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 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	GHGs
Air Stripper	--	--	--	--	1.32	--	--	--
Product FL 296	--	--	--	--	4.86	--	--	--
Product SJF 041	--	--	--	--	0.41	--	--	--
Product SJF 042	--	--	--	--		--	--	--
Tank TS-1027	--	--	--	--	0.00046	--	--	--
Total for Modification	--	--	--	--	6.59	--	--	--
Significant Level	--	--	--	--	40	--	40	75,000 CO _{2e}

This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability Determination

- (a) 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 combustion air stripper and the tank, each has potential to emit regulated pollutants (uncontrolled) less than the major source thresholds.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new units as part of this modification.

NSPS:

- (b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this proposed modification.

NESHAP:

- (c) 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.

State Rule Applicability Determination

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

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

326 IAC 8-3-2 (Cold Cleaner Operations)

The cold cleaner degreasing operations are subject to the provisions of 326 IAC 8-3-2 because the degreaser were constructed in Lake County prior to January 1, 1980 at a source that has potential VOC emissions greater than 100 tons per year.

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.

There are no compliance determination and monitoring requirements included in this modification at this time.

Proposed Changes

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

Change 1: The Source status has been update in Section A.1 of the permit.

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 Ozone PM_{2.5} Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD 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 2: The new insignificant emission units and the existing emission units that were relocated in the permit have been added to the permit in Section D.2, D.3, D.4, D.6, D.7 and D.8. Emission units in Section D.5 - Fuel Additive system have been removed from the permit. The permit condition for the part washers that was added to Section D.8 has been added to the permit.

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 3,000pounds 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) **Seven Nine (79)** 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), **and** TR-2010 (constructed in 1983), ~~and TR-2014 (constructed in 1990)~~, with a maximum capacity of 2,000 gallons each;
 - (2) **Three Four (3 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;

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) ~~Two Three (23)~~ 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 2012~~0~~, 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-2121~~Aa~~ 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

*

- (q) **Three (3) reactors, identified as TR-2006 (constructed before 1976), TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each, and TR-2015 (constructed in 1990), with a maximum capacity of 4,000 gallons.**

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

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.~~
- (rx) 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:

- (sy) ~~Four Five (45)~~ 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.
- (tz) 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)]

- (26) One (1) 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.**
- (267) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1033, constructed in 1986.
- (278) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1039, constructed in 1987.
- (289) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1040, constructed in 1987.
- (2930) One (1) storage tank, maximum capacity of 15,540 gallons, identified as TS-1042, constructed in 1989.
- (301) One (1) storage or blend tank, maximum capacity of 14,900 gallons, identified as TS-1043, constructed in 1990.
- (342) One (1) wax storage tank, maximum capacity of 20,390 gallons, identified as TS-1056, constructed in 1978.
- (323) One (1) storage tank, maximum capacity of 20,390 gallons, identified as TS-1057, constructed in 1978.
- (334) One (1) storage tank, maximum capacity of 4,010 gallons, identified as TS-1081, constructed in 1989.
- (345) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1082, constructed in 1989.
- (356) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2160, constructed before 1976.
- (367) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2163, constructed before 1976.
- (378) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2168, constructed before 1976.
- (389) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2169, constructed before 1976.
- (3940) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2170, constructed before 1976.
- (401) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2178, constructed in 1998.
- (412) One (1) storage tank, maximum capacity of 2,600 gallons, identified as TS-2209, constructed before 1979.
- (423) One (1) storage tank, maximum capacity of 10,800 gallons, identified as TS-2218, constructed before 1979.
- (434) One (1) storage tank, maximum capacity of 10,690 gallons, identified as TS-2252, constructed prior to 1976.

- (445) One (1) storage tank, maximum capacity of 6,760 gallons, identified as TS-2253, constructed before 1976.
- (456) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2255, constructed before 1976.
- (467) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2264, constructed before 1979.
- (478) One (1) storage tank, maximum capacity of 31,070 gallons, identified as TS-2265, constructed before 1979.
- (489) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2271, constructed in 2005.
- (4950) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2272, constructed in 2005.
- (501) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2275, constructed before 1979.
- (542) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2276, constructed before 1979.
- (523) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2277, constructed before 1976.
- (534) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2605, constructed in 1990.
- (545) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2315, constructed in 1990.
- (556) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2362, constructed in 1990.
- (567) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2364, constructed in 1990.
- (578) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2365, constructed in 1990.
- (589) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2367, constructed in 1990.
- (5960) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2606, constructed in 1989.
- (601) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.
- (642) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2611, constructed in 1990.
- (623) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2612, constructed in 1990.

- (634) One (1) storage tank, maximum capacity of 30,080 gallons, identified as TS-2613, constructed in 1990.
- (645) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2618, constructed in 1990.
- (656) One (1) storage tank, maximum capacity of 16,920 gallons, identified as TS-2619, constructed in 1990.
- (667) 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.
- (678) 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.
- (689) 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

- (bz) 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.
- (c) **Wastewater treatment plant air strippers.**
- (d) **Two (2) parts washers, identified as PW-1M and PW-2L, constructed in 2005 , with a rated capacity of 40 gallons.**

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) ~~Seven Nine (79)~~ **(79)** 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), **and** TR-2010 (constructed in 1983), ~~and TR-2014 (constructed in 1990)~~, with a maximum capacity of 2,000 gallons each;
 - (2) ~~Three Four (34)~~ **(34)** 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;

(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)]

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) ~~Two Three (23)~~ 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 ~~2012~~ **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-2121~~Aa~~ 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.

(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.3.7 VOC Emissions

Compliance with the limit in Condition ~~D 3.3 D-2.4~~ shall be demonstrated using the following equation:

Change 4:

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:

- (p) One (1) amine storage tank, identified as TS-2391, permitted in 2010, with a maximum capacity of 7,950 gallons.

- (q) **Three (3) reactors, identified as TR-2006 (constructed before 1976), TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each, and TR-2015 (constructed in 1990), with a maximum capacity of 4,000 gallons.**

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

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

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:

- (g) ~~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.~~
- (f) ~~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.~~

- (vr) 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.)

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), **and TR-2322 (constructed in 1984)**, maximum capacity of 5,500, 2,000, 7,000, ~~and 400~~ **and 2,000** 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) ~~One Two~~ (12) 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.)

- 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

- (ay) 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)]

- (26) **One (1) tank, identified as TS-1027, constructed in 1985, maximum capacity of 14,930 gallons, controlled by a carbon adsorption drum, identified as Stack TF-1027.**
- (267) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1033, constructed in 1986.
- (278) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1039, constructed in 1987.

- (289) One (1) storage tank, maximum capacity of 15,380 gallons, identified as TS-1040, constructed in 1987.
- (2930) One (1) storage tank, maximum capacity of 15,540 gallons, identified as TS-1042, constructed in 1989.
- (301) One (1) storage or blend tank, maximum capacity of 14,900 gallons, identified as TS-1043, constructed in 1990.
- (342) One (1) wax storage tank, maximum capacity of 20,390 gallons, identified as TS-1056, constructed in 1978.
- (323) One (1) storage tank, maximum capacity of 20,390 gallons, identified as TS-1057, constructed in 1978.
- (334) One (1) storage tank, maximum capacity of 4,010 gallons, identified as TS-1081, constructed in 1989.
- (345) One (1) storage tank, maximum capacity of 15,220 gallons, identified as TS-1082, constructed in 1989.
- (356) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2160, constructed before 1976.
- (367) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2163, constructed before 1976.
- (378) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2168, constructed before 1976.
- (389) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2169, constructed before 1976.
- (3940) One (1) storage tank, maximum capacity of 15,270 gallons, identified as TS-2170, constructed before 1976.
- (401) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2178, constructed in 1998.
- (442) One (1) storage tank, maximum capacity of 2,600 gallons, identified as TS-2209, constructed before 1979.
- (423) One (1) storage tank, maximum capacity of 10,800 gallons, identified as TS-2218, constructed before 1979.
- (434) One (1) storage tank, maximum capacity of 10,690 gallons, identified as TS-2252, constructed prior to 1976.
- (445) One (1) storage tank, maximum capacity of 6,760 gallons, identified as TS-2253, constructed before 1976.
- (456) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2255, constructed before 1976.
- (467) One (1) storage tank, maximum capacity of 10,360 gallons, identified as TS-2264, constructed before 1979.
- (478) One (1) storage tank, maximum capacity of 31,070 gallons, identified as TS-2265, constructed before 1979.

- (489) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2271, constructed in 2005.
- (4950) One (1) storage tank, maximum capacity of 3,920 gallons, identified as TS-2272, constructed in 2005.
- (501) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2275, constructed before 1979.
- (512) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2276, constructed before 1979.
- (523) One (1) storage tank, maximum capacity of 23,310 gallons, identified as TS-2277, constructed before 1976.
- (534) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2605, constructed in 1990.
- (545) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2315, constructed in 1990.
- (556) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2362, constructed in 1990.
- (567) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2364, constructed in 1990.
- (578) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2365, constructed in 1990.
- (589) One (1) storage tank, maximum capacity of 30,400 gallons, identified as TS-2367, constructed in 1990.
- (5960) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2606, constructed in 1989.
- (601) One (1) storage tank, permitted in 2010, identified as TS-2607, with a maximum capacity of 30,000 gallons.
- (612) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2611, constructed in 1990.
- (623) One (1) storage tank, maximum capacity of 4,760 gallons, identified as TS-2612, constructed in 1990.
- (634) One (1) storage tank, maximum capacity of 30,080 gallons, identified as TS-2613, constructed in 1990.
- (645) One (1) storage tank, maximum capacity of 10,570 gallons, identified as TS-2618, constructed in 1990.
- (656) One (1) storage tank, maximum capacity of 16,920 gallons, identified as TS-2619, constructed in 1990.
- (667) 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.
- (677) 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.

- (689) 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.7.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9]

- (16) TS-1027**
- (167) TP-1033
- (178) TS-1039
- (189) TS-1040
- (1920) TS-1042
- (201) TS-1043
- (212) TS-1056
- (223) TS-1057
- (234) TS-1081
- (245) TS-1082
- (256) TS-2160
- (267) TS-2163
- (278) TS-2168
- (289) TS-2169
- (2930) TS-2170
- (301) TS-2209
- (312) TS-2218
- (323) TS-2252
- (334) TS-2253
- (345) TS-2255
- (356) TS-2264
- (367) TS-2265
- (378) TS-2271
- (389) TS-2272
- (3940) TS-2275
- (401) TS-2276
- (412) TS-2277
- (423) TS-2605
- (434) TS-2611
- (445) TS-2612
- (456) TS-2618
- (467) TS-2619
- (478) TP-2550
- (489) TP-2551
- (4950) TP-2617

SECTION D.8

FACILITY OPERATION CONDITIONS

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

Specifically regulated insignificant activities with emissions below significant thresholds:

- (zb)** 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.
- (c)** **Wastewater treatment plant air strippers.**
- (d)** **Two (2) parts washers, identified as PW-1M and PW-2L, constructed in 2005, with a rated capacity of 40 gallons.**

(The information describing the process contained in this emissions unit description box is descriptive

information and does not constitute enforceable conditions.)

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

D.8.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

- (a) Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

- (b) The Permittee shall ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:

- (A) must be a solid, fluid stream; and
- (B) shall be applied at a pressure that does not cause excessive splashing.

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) ~~Seven Nine (79)~~ **Seven (7)** 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), **and** TR-2010 (constructed in 1983), ~~and TR-2014 (constructed in 1990)~~, with a maximum capacity of 2,000 gallons each;
 - (2) ~~Three Five (35)~~ **Three (3)** 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. ~~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.~~

- (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.
- (q) **Three (3) reactors, identified as TR-2006 (constructed before 1976), , TR-2014 (constructed in 1990), with a maximum capacity of 2,000 gallons each, and TR-2015 (constructed in 1990), with a maximum capacity of 4,000 gallons.**

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

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:

- (e) ~~The system consisting of:~~
 - (1) ~~Nine (9)~~ **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.
- (rs) 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:

- (st) ~~Four Five~~ (4) 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.
- (tu) ~~One Two~~ (12) 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.)

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Administrative Amendment No. 089-32930-0022. The staff recommends to the Commissioner that this Part 70 Administrative Amendment be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Josiah Balogun at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5257 or toll free at 1-800-451-6027 extension 4-5257.
- (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

Emission Summary

Source Name: Dover Chemical Corp.
Source Location: 3000 Sheffield Ave., Hammond, IN 46327
Permit Number: 089-32930-00227
Permit Reviewer: Josiah Balogun
Date: 22-Mar-2013

Uncontrolled Potential to Emit

	PM (tons/yr)	PM₁₀ (tons/yr)	PM_{2.5} (tons/yr)	SO₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	GHGs as CO₂e (tons/yr)	HAPs (tons/yr)
Emission Unit									
Air Stripper	0	0	0	0	1.32	0	0	0	0
Product FL 296	0	0	0	0	4.86	0	0	0	0
Product SJF 041	0	0	0	0	0.41	0	0	0	0
Product SJF 042	0	0	0	0		0	0	0	0
Tank TS-1027	0	0	0	0	0.00046	0	0	0	0
Total Emissions	0.00	0.00	0.00	0.00	6.59	0.00	0.00	0.00	0.00

Limited Potential to Emit

	PM (tons/yr)	PM₁₀ (tons/yr)	PM_{2.5} (tons/yr)	SO₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	GHGs as CO₂e (tons/yr)	HAPs (tons/yr)
Emission Unit									
Air Stripper	0	0	0	0	1.32	0	0	0	0
Product FL 296	0	0	0	0	4.86	0	0	0	0
Product SJF 041	0	0	0	0	0.41	0	0	0	0
Product SJF 042	0	0	0	0		0	0	0	0
Tank TS-1027	0	0	0	0	0.00046	0	0	0	0
Total Emissions	0.00	0.00	0.00	0.00	6.59	0.00	0.00	0.00	0.00

Note: Product SJF 041 and 042 are being mixed together so the worst case is SJF 042 with 0.41 tons per year of VOC emissions.

2012 Dover Chemical self Monitoring Report Manhole 105
 Manhole 105 - Volatile Organic Compounds

Sample Date	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	AVERAGE	MAXIMUM	Total lbs
Flow	mgd 0.104	0.091	0.079	0.073	0.064	0.066	0.079	0.070	0.069	0.076	0.081	0.087	0.078	0.104	
Chloromethane (Methyl Chloride)	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
Vinyl Chloride	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
Chloroethane	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
1,1-Dichloroethylene	ug/L 10	10	10	10	10	10	10	11.67	10	10	10	10	10.14	11.67	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0067	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.41
Methylene Chloride	ug/L 674	27	34.5	13.5	15	10.5	10	10	9.65	13	215	95	93.93	674.00	
	lbs/day 0.5038	0.0206	0.0211	0.0083	0.0081	0.0058	0.0066	0.0058	0.0055	0.0084	0.1412	0.0592	0.07	0.50	24.17
1,2-Trans Dichloroethylene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
Benzene	ug/L 82.5	42.33	51	10	49.5	10	10	10	10	10	10	10	25.44	82.50	
	lbs/day 0.0693	0.0319	0.0331	0.0061	0.0178	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.02	0.07	6.15
Carbon Tetrachloride	ug/L 20	20	20	20	20	20	15	20	20	20	20	20	19.58	20.00	
	lbs/day 0.0174	0.0152	0.0132	0.0121	0.0107	0.0111	0.0088	0.0116	0.0115	0.0127	0.0136	0.0144	0.01	0.02	4.64
Chlorobenzene	ug/L 20	20	20	20	20	20	20	20	20	20	20	20	20.00	20.00	
	lbs/day 0.0174	0.0152	0.0132	0.0121	0.0107	0.0111	0.0131	0.0116	0.0115	0.0127	0.0136	0.0144	0.01	0.02	4.77
Chloroform	ug/L 20	20	20	20	20	20	20	20	20	20	20	20	20.00	20.00	
	lbs/day 0.0174	0.0152	0.0132	0.0121	0.0107	0.0111	0.0131	0.0116	0.0115	0.0127	0.0136	0.0144	0.01	0.02	4.77
1,2 Dichlorobenzene	ug/L 10	10	10	10	10	10	15	10	10	10	10	10	10.42	15.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0108	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.51
1,3-Dichlorobenzene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
1,4-Dichlorobenzene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
1,1-Dichloroethane	ug/L 86.5	11.33	479	99	60	14	10	31.33	64.75	40	10	59	80.41	479.00	
	lbs/day 0.0637	0.0098	0.3514	0.0632	0.0216	0.0075	0.0066	0.0166	0.0388	0.0244	0.0068	0.0472	0.05	0.35	19.97
1,2-Dichloropropane	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
Ethylbenzene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
Tetrachloroethylene	ug/L 10	10	10	10.5	10	10	10	10	10	10	10	10	10.04	10.50	
	lbs/day 0.0087	0.0076	0.0066	0.0064	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.39
Toluene	ug/L 21	10	10	10	10	10	10	10	10	10	10	10	10.92	21.00	
	lbs/day 0.0169	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.02	2.63
1,1,1-Trichloroethane	ug/L 21.25	20	20	23.5	20	22.5	20	20	20	20	20	20	20.60	23.50	
	lbs/day 0.0183	0.0152	0.0132	0.0144	0.0107	0.0126	0.0131	0.0116	0.0115	0.0127	0.0136	0.0144	0.01	0.02	4.91
1,1,2-Trichloroethane	ug/L 12.5	10	25	25	37.5	25	37.5	41.67	25	25	25	25	26.18	41.67	
	lbs/day 0.0106	0.0076	0.0165	0.0151	0.0200	0.0139	0.0221	0.0240	0.0143	0.0159	0.0170	0.0181	0.02	0.02	5.93
Trichloroethylene	ug/L 36	10	10	10.5	10	10	10	10	10	10	10	10	12.21	36.00	
	lbs/day 0.0280	0.0076	0.0066	0.0064	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.03	2.98
Total Xylenes	ug/L 20	16.67	20	20	20	20	20	20	20	20	20	20	19.72	20.00	
	lbs/day 0.0174	0.0122	0.0132	0.0121	0.0109	0.0111	0.0131	0.0116	0.0115	0.0127	0.0136	0.0144	0.01	0.02	4.68
1,3-Dichloropropylene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
Isopropylbenzene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
1,2,4-Trimethylbenzene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
o-Xylene	ug/L 10	10	10	10	10	10	10	10	10	10	10	10	10.00	10.00	
	lbs/day 0.0087	0.0076	0.0066	0.0061	0.0054	0.0055	0.0066	0.0058	0.0057	0.0064	0.0068	0.0072	0.01	0.01	2.38
m&p-Xylene	ug/L 57.5	30	30	34	30	31.5	30	30	30	30	30	30	32.75	57.50	
	lbs/day 0.0466	0.0229	0.0198	0.0207	0.0161	0.0176	0.0197	0.0175	0.0172	0.0191	0.0203	0.0217	0.02	0.05	7.88
Grand Total															131.76

Total lbs figured using
 365 days/yr * avg annual lbs

Material Balance _ Loss From Methanol Production	lbs												AVERAGE	MAXIMUM	Total lbs	
METHANOL lbs/Month	0.0000	0.0002	0.0000	0.0002	0.0001	0.0000	0.0000	0.0002	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0002	0.0225

Avg Total VOC
 Year in effluent
 to sewer 131.78 lbs./yr

Note that many of these have been reported as below the detection limits and that the emissions were calculated at the detection limit instead of as zero. Therefore, these emissions calculations are very conservative.

0.07 Tons/year

air strippers are approx 95% efficient		
Avg Total Lbs/year to Air	Avg Daily Air Lbs/Day to air	Tons/year
2635.22	7.22	1.32

Potential-to-Emit Calculation							

FL 296 will be manufactured in TR-2620 (R-12). The Potential-to-Emit calculation will be based on the premise that FL 296 will be manufactured at maximum rate for the entire year.

FL 296 Formula - This is the "Raw Formula" - that does not take into account recycle of 2EH. It essentially represents the composition of the reaction mass prior to heatup and cook.

	Material	%w/w	Mass (lbs)	(lbs/gal)	Vol (gal)
	Oleic Acid	59.796%	13,813	7.42	1,862
	2-Ethylhexanol	39.852%	9,206	6.94	1,326
	50% Hypophosphorus Acid	0.332%	77	12.50	6
	70% Methanesulfonic Acid	0.020%	5	12.40	0
	Total RM's	100.00%	23,100		3,195
	Excess (recycle) 2-Ethylhexanol	12.29%	2,840	6.94	409
	Water	3.99%	921	8.33	111
	Finished Product	83.72%	19,340	7.29	2,653
	Total Products	100.00%	23,100		

The FL 296 process involves charging the raw materials to the reactor, then cooking at approximately 330°F until the reaction is complete, then stripping excess 2-Ethylhexanol. During the cook, 2-Ethylhexanol and water are distilled overhead and condensed. The water and 2EH separate in the overhead receiver, and 2EH is refluxed back into the reactor. Following the cook, excess 2EH is stripped out of the product, condensed, and drained to the recycle 2EH tank, from which this material is fed back into the next FL 296 batch. The condenser and receiver are vented to the flare during these operations. Nitrogen is purged thru the reactor during this process, so potential emissions are primarily the result of nitrogen carrying 2EH thru the condenser to the flare.

Potential emissions will be generated by the following steps in the process:							
	- Charging 2EH to the reactor						
	- Cooking and Stripping of the batch						
	- Drainage of excess 2EH and water from the overhead receiver to the recycle tank						

When 2EH is charged to the reactor, non-condensable gases are displaced and vented thru the condenser and receiver to the flare. These gases will contain small amounts of 2EH that pass thru the condenser. For the purpose of this calculation, we estimate that the outlet gas from the condenser will be less than 150°F. The concentration of 2EH in the vent gases is estimated using process simulation software (ChemCAD).

	Condenser outlet temperature	150	°F				
	Outlet gas 2EH concentration	0.00241	lb 2EH/CF vent gas				
	Volume of vent gas	177.33	CF/batch				
	Potential emissions from Charging 2EH	0.43	lb 2EH/batch				

During the cooking and stripping operations, nitrogen is fed into the reactor. As above, we estimate the condenser outlet gas to be less than 150°F.

	Condenser outlet temperature	150	°F				

	Outlet gas 2EH concentration	0.00241	lb 2EH/CF vent gas	
	Nitrogen purge rate	10	CFM	Page 2 of 2 TSD Appx B
	Nitrogen purge duration	18	hr/batch	
	Volume of vent gas	10,800	CF/batch	
	Potential emissions from Nitrogen purge	26.03	lb 2EH/batch	

When excess 2EH and water are drained from the overhead receiver to their respective tanks, non-condensable gases are displaced and vented. In the case of the water tank, these gases are vented to the flare. Because the water will be saturated with 2EH, vent gases from the water transfer will also contain 2EH. In the case of the 2EH tank, these gases are vented thru a carbon drum to atmosphere. As both the water and 2EH were condensed at a temperature estimated to be less than 150°F, this is the temperature that will be used for the vent gases during their transfer.

	2EH/Water temperature	150	°F	
	Outlet gas 2EH concentration	0.00241	lb 2EH/CF vent gas	
	Volume of vent gas	69.48	CF/batch	
	Potential emissions from 2EH and water drainage	0.17	lb 2EH/batch	

The total potential emissions from one FL 296 batch equal the sum of the PTE's from the above steps, and total annual potential emissions from FL 296 manufacture are based on batch cycle time assuming full-time operation of the reactor.

	Total potential emissions from one FL 296 batch	26.62	lb 2EH/batch	
	Batch cycle time	24	hr/batch	
	Annual batches of FL 296	365	batches/yr	
	Total annual potential emissions	9,717.33	lb 2EH/yr	
		4.86	tpy 2EH	

Potential-to-Emit Calculation

SJF 041 will be manufactured in TR-2014 (R-14) and TR-2015 (R-15). The Potential-to-Emit calculation will be based on the premise that the product will be manufactured at maximum rate for the entire year.

The formula for the product is shown on the Formula sheet. The product will be manufactured by first making a batch of PIBSA/Amine/Fuel Oil in TR-2014 (called "Reaction"). During this step, the PIBSA reacts with the Amine to form the active compound in the product. This PIBSA/Amine/Fuel Oil Reaction Product is then fed, one third at a time, into three batches of finished product in TR-2015 (called "Blend").

The PTE for the process can then be broken down as follows:

Reaction

- Charging Fuel Oil to TR-2014
- Charging MEA/TEA Mixture to TR-2014
- Charging PIBSA to TR-2014
- Cook

Blend

- Charging Reaction Product to TR-2015
- Charging Fuel Oil to TR-2015
- Charging Mineral Oil to TR-2015
- Charging Lard Oil to TR-2015
- Charging Sufactant to TR-2015

Charging Fuel Oil to TR-2014

Charge Temperature	122.00 °F
	581.67 °R
Charge Volume (Vapor Displaced)	753.19 gal/batch
	100.69 CF/batch
Molar Vapor Displacement	0.24 lbmoles/batch

PTE

	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	38.61	100.00%	2.1106	0.2777%	130.00	0.000658	0.0856

Charging MEA/TEA Mixture to TR-2014

Charge Temperature	122.00 °F
	581.67 °R
Charge Volume (Vapor Displaced)	111.85 gal/batch
	14.95 CF/batch
Molar Vapor Displacement	0.04 lbmoles/batch

PTE

	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	38.61	80.23%	2.1106	0.2228%	130.00	0.000078	0.0102

MEA	4.75	9.87%	2.5450	0.0331%	61.08	0.000012	0.0007
TEA	4.76	9.90%	0.0001	0.0000%	149.19	0.000000	0.0000
Total	48.12	100.00%				0.000090	0.0109
Charging PIBSA to TR-2014							
			Charge Temperature	122.00	°F		
				581.67	°R		
			Charge Volume (Vapor Displaced)	990.92	gal/batch		
				132.47	CF/batch		
			Molar Vapor Displacement	0.31	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	38.61	70.12%	2.1106	0.1947%	130.00	0.000607	0.0789
MEA	4.75	8.63%	2.5450	0.0289%	61.08	0.000090	0.0055
TEA	4.76	8.65%	0.0001	0.0000%	149.19	0.000000	0.0000
PIBSA	6.94	12.61%	0.0039	0.0001%	1,100.00	0.000000	0.0002
Total	55.06	100.00%				0.000698	0.0847
Cook							
The Cook involves an isothermal hold with no gas purge or sparge, and without stoichiometric byproduct. The amines react with the PIBSA by addition and are thus consumed. The Cook step therefore involves no additional PTE.							
Reaction PTE							
	Step					PTE (lb/batch)	
	- Charging Fuel Oil to TR-2014					0.0856	
	- Charging MEA/TEA Mixture to TR-2014					0.0109	
	- Charging PIBSA to TR-2014					0.0847	
	- Cook					0.0000	
	Total for one Reaction Batch					0.1812	
Charging Reaction Product to TR-2015							
			Charge Temperature	122.00	°F		
				581.67	°R		
			Charge Volume (Vapor Displaced)	618.65	gal/batch		
				82.70	CF/batch		
			Molar Vapor Displacement	0.19	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	12.87	84.76%	2.1106	0.2354%	130.00	0.000458	0.0596
Pt 1 Rxn Pr	2.31	15.24%	0.0039	0.0001%	1,244.17	0.000000	0.0002
Total	15.18	100.00%				0.000458	0.0598

Charging Fuel Oil to TR-2015							
			Charge Temperature	122.00	°F		
				581.67	°R		
			Charge Volume (Vapor Displaced)	0.00	gal/batch		
				0.00	CF/batch		
			Molar Vapor Displacement	0.00	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	12.87	84.76%	2.1106	0.2354%	130.00	0.000000	0.0000
Pt 1 Rxn Pr	2.31	15.24%	0.0039	0.0001%	1,244.17	0.000000	0.0000
Total	15.18	100.00%				0.000000	0.0000
Charging Mineral Oil to TR-2015							
			Charge Temperature	122.00	°F		
				581.67	°R		
			Charge Volume (Vapor Displaced)	2,747.63	gal/batch		
				367.31	CF/batch		
			Molar Vapor Displacement	0.86	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	12.87	20.17%	2.1106	0.0560%	130.00	0.000484	0.0630
Pt 1 Rxn Pr	2.31	3.63%	0.0039	0.0000%	1,244.17	0.000000	0.0002
Mineral Oil	48.64	76.21%	0.0001	0.0000%	400.00	0.000000	0.0000
Total	63.82	100.00%				0.000485	0.0632
Charging Lard Oil to TR-2015							
			Charge Temperature	122.00	°F		
				581.67	°R		
			Charge Volume (Vapor Displaced)	259.60	gal/batch		
				34.70	CF/batch		
			Molar Vapor Displacement	0.08	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	12.87	19.49%	2.1106	0.0541%	130.00	0.000044	0.0058
Pt 1 Rxn Pr	2.31	3.50%	0.0039	0.0000%	1,244.17	0.000000	0.0000
Mineral Oil	48.64	73.67%	0.0001	0.0000%	400.00	0.000000	0.0000
Lard Oil	2.20	3.33%	0.0001	0.0000%	885.00	0.000000	0.0000
Total	66.02	100.00%				0.000044	0.0058
Charging Surfactant to TR-2015							
			Charge Temperature	122.00	°F		

				581.67	°R	Page 4 of 11 TSD Appx C	
	Charge Volume (Vapor Displaced)			40.78	gal/batch		
				5.45	CF/batch		
	Molar Vapor Displacement			0.01	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%/m/m)	Vapor Pres (mmHg)	Vapor Cmp (%/m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	12.87	19.40%	2.1106	0.0539%	130.00	0.000007	0.0009
Pt 1 Rxn Pr	2.31	3.49%	0.0039	0.0000%	1,244.17	0.000000	0.0000
Mineral Oil	48.64	73.32%	0.0001	0.0000%	400.00	0.000000	0.0000
Lard Oil	2.20	3.32%	0.0001	0.0000%	885.00	0.000000	0.0000
Surfactant	0.31	0.47%	0.0039	0.0000%	1,000.00	0.000000	0.0000
Total	66.33	100.00%				0.000007	0.0009
Blend PTE							
	Step				PTE (lb/batch)		
	- Charging Part 1 to TR-2015				0.0598		
	- Charging Fuel Oil to TR-2015				0.0000		
	- Charging Mineral Oil to TR-2015				0.0632		
	- Charging Lard Oil to TR-2015				0.0058		
	- Charging Sufactant to TR-2015				0.0009		
	Total for one Blend Batch				0.1296		
Annual Process PTE							
	Batch PTE (lb/batch)	Batches/ Proc Cycle	Batch Time (hr/batch)	Cycle Time (hr/cycle)	Cycles/yr	Batches/yr	PTE (lb/yr)
Reaction	0.1812	1	4.00	4	730	730	132.24
Blend	0.1296	3	4.00	12	730	2190	283.91
						Total	416.15
						tpy	0.21
Tank Calculation: TS-1018 (Existing Tank not part of the PTE)							
TS-1018 will be used to store purchased #2 Fuel Oil. #2 Fuel Oil is charged to both TR-2014 and TR-2015 and consumed in the process. #2 Fuel Oil will be stored ambient conditions.							
	#2 Fuel Oil usage per Reaction batch			753	gal Fuel Oil/batch		
	Annual Reaction batches			730	batches/yr		
	TS-1018 annual throughput (Reaction)			549,829	gal Fuel Oil/yr		
	#2 Fuel Oil usage per Blend batch			0	gal Fuel Oil/batch		
	Annual Blend batches			2,190	batches/yr		
	TS-1018 annual throughput (Blend)			0	gal Fuel Oil/yr		
	TS-1018 annual throughput (Total)			549,829	gal Fuel Oil/yr		
	TANKS program annual emission estimate			16.6200	lb Fuel Oil/yr		
				0.00831	tpy Fuel Oil		
Tank Calculation: TS-1014 & 1017 (Existing Tank not part of the PTE)							

Potential-to-Emit Calculation

SJF 042 will be manufactured in TR-2014 (R-14) and TR-2015 (R-15). The Potential-to-Emit calculation will be based on the premise that the product will be manufactured at maximum rate for the entire year.

The formula for the product is shown on the Formula sheet. The product will be manufactured by first making a batch of PIBSA/Amine/Fuel Oil in TR-2014 (called "Reaction"). During this step, the PIBSA reacts with the Amine to form the active compound in the product. This PIBSA/Amine/Fuel Oil Reaction Product is then fed, one third at a time, into three batches of finished product in TR-2015 (called "Blend").

The PTE for the process can then be broken down as follows:

Reaction	- Charging Fuel Oil to TR-2014
	- Charging MEA/TEA Mixture to TR-2014
	- Charging PIBSA to TR-2014
	- Cook
Blend	- Charging Reaction Product to TR-2015
	- Charging Fuel Oil to TR-2015
	- Charging Mineral Oil to TR-2015
	- Charging Lard Oil to TR-2015
	- Charging Sufactant to TR-2015

Charging Fuel Oil to TR-2014

Charge Temperature	122.00 °F
	581.67 °R
Charge Volume (Vapor Displaced)	497.50 gal/batch
	66.51 CF/batch
Molar Vapor Displacement	0.16 lbmoles/batch

						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	25.50	100.00%	2.1106	0.2777%	130.00	0.000435	0.0565

Charging MEA/TEA Mixture to TR-2014

Charge Temperature	122.00 °F
	581.67 °R
Charge Volume (Vapor Displaced)	73.94 gal/batch
	9.88 CF/batch
Molar Vapor Displacement	0.02 lbmoles/batch

						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	25.50	80.22%	2.1106	0.2228%	130.00	0.000052	0.0067

Charging Fuel Oil to TR-2015						Page 8 of 11 TSD Appx C	
Charge Temperature				122.00	°F		
				581.67	°R		
Charge Volume (Vapor Displaced)				1,250.11	gal/batch		
				167.12	CF/batch		
Molar Vapor Displacement				0.39	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	72.58	97.94%	2.1106	0.2720%	130.00	0.001070	0.1391
Rxtn Prod	1.52	2.06%	0.0039	0.0000%	1,244.17	0.000000	0.0001
Total	74.11	100.00%				0.001070	0.1392
Charging Mineral Oil to TR-2015							
Charge Temperature				122.00	°F		
				581.67	°R		
Charge Volume (Vapor Displaced)				1,810.67	gal/batch		
				242.05	CF/batch		
Molar Vapor Displacement				0.57	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	72.58	68.37%	2.1106	0.1899%	130.00	0.001082	0.1407
Rxtn Prod	1.52	1.44%	0.0039	0.0000%	1,244.17	0.000000	0.0001
Mineral Oil	32.05	30.19%	0.0001	0.0000%	400.00	0.000000	0.0000
Total	106.16	100.00%				0.001082	0.1407
Charging Lard Oil to TR-2015							
Charge Temperature				122.00	°F		
				581.67	°R		
Charge Volume (Vapor Displaced)				171.01	gal/batch		
				22.86	CF/batch		
Molar Vapor Displacement				0.05	lbmoles/batch		
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	72.58	67.45%	2.1106	0.1873%	130.00	0.000101	0.0131
Rxtn Prod	1.52	1.42%	0.0039	0.0000%	1,244.17	0.000000	0.0000
Mineral Oil	32.05	29.79%	0.0001	0.0000%	400.00	0.000000	0.0000
Lard Oil	1.45	1.35%	0.0001	0.0000%	885.00	0.000000	0.0000
Total	107.61	100.00%				0.000101	0.0131
Charging Surfactant to TR-2015							
Charge Temperature				122.00	°F		

				581.67	°R		
	Charge Volume (Vapor Displaced)		26.77	gal/batch	Page 9 of 11 TSD Appx C		
			3.58	CF/batch			
	Molar Vapor Displacement		0.01	lbmoles/batch			
						PTE	
	Liquid Cmp (lbmole/bat)	Liquid Cmp (%m/m)	Vapor Pres (mmHg)	Vapor Cmp (%m/m)	Vapor MW (lb/lbmole)	(lbmoles/ batch)	(lb/batch)
Fuel Oil	72.58	67.32%	2.1106	0.1870%	130.00	0.000016	0.0020
Rxtn Prod	1.52	1.41%	0.0039	0.0000%	1,244.17	0.000000	0.0000
Mineral Oil	32.05	29.73%	0.0001	0.0000%	400.00	0.000000	0.0000
Lard Oil	1.45	1.34%	0.0001	0.0000%	885.00	0.000000	0.0000
Surfactant	0.21	0.19%	0.0039	0.0000%	1,000.00	0.000000	0.0000
Total	107.81	100.00%				0.000016	0.0020
Blend PTE							
	Step				PTE (lb/batch)		
	- Charging reaction Product to TR-2015				0.0394		
	- Charging Fuel Oil to TR-2015				0.1392		
	- Charging Mineral Oil to TR-2015				0.1407		
	- Charging Lard Oil to TR-2015				0.0131		
	- Charging Sufactant to TR-2015				0.0020		
	Total for one Blend Batch				0.3345		
Annual Process PTE							
	Batch PTE (lb/batch)	Batches/ Proc Cycle	Batch Time (hr/batch)	Cycle Time (hr/cycle)	Cycles/yr	Batches/yr	PTE (lb/yr)
Reaction	0.1195	1	4.00	4	730	730	87.26
Blend	0.3345	3	4.00	12	730	2190	732.54
						Total	819.80
						tpy	0.41
Tank Calculation: TS-1018			(Existing Tank not part of the PTE)				
TS-1018 will be used to store purchased #2 Fuel Oil. #2 Fuel Oil is charged to both TR-2014 and TR-2015 and consumed in the process. #2 Fuel Oil will be stored ambient conditions.							
	#2 Fuel Oil usage per Reaction batch		498	gal Fuel Oil/batch			
	Annual Reaction batches		730	batches/yr			
	TS-1018 annual throughput (Reaction)		363,178	gal Fuel Oil/yr			
	#2 Fuel Oil usage per Blend batch		1,250	gal Fuel Oil/batch			
	Annual Blend batches		2,190	batches/yr			
	TS-1018 annual throughput (Blend)		2,737,738	gal Fuel Oil/yr			
	TS-1018 annual throughput (Total)		3,100,916	gal Fuel Oil/yr			
	TANKS program annual emission estimate		25.2800	lb Fuel Oil/yr			
			0.01264	tpy Fuel Oil			
Tank Calculation: TS-1014 & 1017			(Existing Tanks not part of the PTE)				

TS-1014 and TS-1017 will both be used to store Mineral Oil. Mineral Oil is charged to TR-2015 and consumed in the process. Mineral Oil will be stored at ambient conditions. The total Mineral Oil throughput for the process will be evenly split between the two tanks, so the PTE from both tanks will be the same.

Dyno SJF Formulations															Page 11 of 11 TSD Appx C	
REACTION										BLEND						
		29.00%	71.00%							#2 Fuel Oil	Mineral Oil	Lard Oil	Surfactant	Total	Total	
	Vapor MW	130.00	61.08	149.19		PIBSA	Total Inputs	Rxtn Prod	1,244.17	130.00	400.00	885.00	1,000.00			
SJF041	Formula	6.37%	0.37%	0.90%	1.27%	9.69%	17.33%	10.96%		0.00%	74.07%	7.41%	1.19%	82.67%	100.00%	
	SPG	0.800	0.993	1.107	1.074	0.925	0.883	0.940		0.800	0.850	0.900	0.920	0.855	0.860	122 °F Temp
	lb/gal	6.664	8.273	9.222	8.947	7.705	7.358	7.831		6.664	7.081	7.497	7.664	7.124	7.163	
	gal/unit	0.00956	0.00045	0.00098	0.00142	0.01258	0.02355	0.01400		0.00000	0.10461	0.00988	0.00155	0.11605	0.13960	
	Part Composition	36.76%	2.13%	5.20%	7.33%	55.91%	100.00%	63.24%								
SJF042	Formula	4.31%	0.25%	0.61%	0.86%	6.54%	11.71%	7.40%		32.49%	50.00%	5.00%	0.80%	88.29%	100.00%	
	SPG	0.800	0.993	1.107	1.074	0.925	0.883	0.940		0.800	0.850	0.900	0.920	0.834	0.839	122 °F Temp
	lb/gal	6.664	8.273	9.222	8.947	7.705	7.357	7.832		6.664	7.081	7.497	7.664	6.947	6.993	
	gal/unit	0.00647	0.00030	0.00066	0.00096	0.00849	0.01592	0.00945		0.04875	0.07062	0.00667	0.00104	0.12708	0.14300	
	Part Composition	36.81%	2.13%	5.21%	7.34%	55.85%	100.00%	63.19%			74.06%	7.41%	1.19%			
SJF041																
Railcar	Mass (lb)	10,038.52	580.41	1,420.99	2,001.40	15,270.53	27,310.46	17,271.93		0.00	116,727.39	11,677.47	1,875.33	130,280.19	157,590.65	50.76 RC/yr
	Volume (gal)	1,506.38	70.16	154.09	223.70	1,981.83	3,711.92	2,205.54		0.00	16,485.76	1,557.62	244.71	18,288.08	22,000.00	
	lbmoles	77.22	9.50	9.52		13.88	110.13	13.88		0.00	291.82	13.19	1.88	306.89	397.99	
4,000 gal Blend	Mass (lb)	1,673.09	96.73	236.83	333.57	2,545.09	4,551.74	2,878.66		0.00	19,454.57	1,946.24	312.55	21,713.36	26,265.11	6 per Railcar
	Volume (gal)	251.06	11.69	25.68	37.28	330.31	618.65	367.59		0.00	2,747.63	259.60	40.78	3,048.01	3,666.67	
	lbmoles	12.87	1.58	1.59		2.31	18.35	2.31		0.00	48.64	2.20	0.31	51.15	66.33	
2,000 gal Reaction	Mass (lb)	5,019.26	290.20	710.50	1,000.70	7,635.27	13,655.23	8,635.97		0.00	58,363.70	5,838.73	937.66	65,140.09	78,795.32	Makes 3x4,000 gal
	Volume (gal)	753.19	35.08	77.04	111.85	990.92	1,855.96	1,102.77		0.00	8,242.88	778.81	122.35	9,144.04	11,000.00	
	lbmoles	38.61	4.75	4.76		6.94	55.06	6.94		0.00	145.91	6.60	0.94	153.44	199.00	
SJF042																
Railcar	Mass (lb)	6,630.73	383.69	939.38	1,323.07	10,061.48	18,015.29	11,384.55		49,984.34	76,922.66	7,692.27	1,230.76	135,830.03	153,845.32	52.00 RC/yr
	Volume (gal)	995.01	46.38	101.86	147.88	1,305.80	2,448.69	1,453.68		7,500.65	10,864.02	1,026.05	160.60	19,551.31	22,000.00	
	lbmoles	51.01	6.28	6.30		9.15	72.73	9.15		384.49	192.31	8.69	1.23	586.72	646.88	
4,000 gal Blend	Mass (lb)	1,105.12	63.95	156.56	220.51	1,676.91	3,002.55	1,897.43		8,330.72	12,820.44	1,282.04	205.13	22,638.34	25,640.89	6 per Railcar
	Volume (gal)	165.83	7.73	16.98	24.65	217.63	408.11	242.28		1,250.11	1,810.67	171.01	26.77	3,258.55	3,666.67	
	lbmoles	8.50	1.05	1.05		1.52	12.12	1.52		64.08	32.05	1.45	0.21	97.79	107.81	
2,000 gal Reaction	Mass (lb)	3,315.37	191.85	469.69	661.53	5,030.74	9,007.64	5,692.28		24,992.17	38,461.33	3,846.13	615.38	67,915.02	76,922.66	Makes 3x4,000 gal
	Volume (gal)	497.50	23.19	50.93	73.94	652.90	1,224.34	726.84		3,750.33	5,432.01	513.02	80.30	9,775.66	11,000.00	
	lbmoles	25.50	3.14	3.15		4.57	36.37	4.57		192.25	96.15	4.35	0.62	293.36	323.44	
Ideal Gas Constant																
R	554.98	(CF)(mmHg)/(lbmole)(°R)														

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	TS-1027-2EH
City:	Hammond
State:	Indiana
Company:	Dover Chemical, Hammond Works
Type of Tank:	Vertical Fixed Roof Tank
Description:	TS-1027 in 2-Ethylhexanol service for Doverlube FL 296.

Tank Dimensions

Shell Height (ft):	21.00
Diameter (ft):	11.00
Liquid Height (ft) :	16.80
Avg. Liquid Height (ft):	8.40
Volume (gallons):	11,943.12
Turnovers:	40.54
Net Throughput(gal/yr):	484,167.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	0.46
Slope (ft/ft) (Cone Roof)	0.08

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Chicago, Illinois (Avg Atmospheric Pressure = 14.38 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

TS-1027-2EH - Vertical Fixed Roof Tank
Hammond, Indiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
2-Ethylhexanol	All	50.66	45.76	55.55	49.02	0.0005	0.0004	0.0008	130.2300			130.23	Option 1: VP50 = .000506633 VP60 = .000960184

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

TS-1027-2EH - Vertical Fixed Roof Tank
Hammond, Indiana

Annual Emission Calculations

Standing Losses (lb):	0.1931
Vapor Space Volume (cu ft):	1,211.9359
Vapor Density (lb/cu ft):	0.0000
Vapor Space Expansion Factor:	0.0342
Vented Vapor Saturation Factor:	0.9996
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	1,211.9359
Tank Diameter (ft):	11.0000
Vapor Space Outage (ft):	12.7528
Tank Shell Height (ft):	21.0000
Average Liquid Height (ft):	8.4000
Roof Outage (ft):	0.1528
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.1528
Roof Height (ft):	0.4583
Roof Slope (ft/ft):	0.0800
Shell Radius (ft):	5.5000
Vapor Density	
Vapor Density (lb/cu ft):	0.0000
Vapor Molecular Weight (lb/lb-mole):	130.2300
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0005
Daily Avg. Liquid Surface Temp. (deg. R):	510.3272
Daily Average Ambient Temp. (deg. F):	49.0000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	508.6900
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,225.5876
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0342
Daily Vapor Temperature Range (deg. R):	19.5858
Daily Vapor Pressure Range (psia):	0.0004
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0005
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0004
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0008
Daily Avg. Liquid Surface Temp. (deg R):	510.3272
Daily Min. Liquid Surface Temp. (deg R):	505.4307
Daily Max. Liquid Surface Temp. (deg R):	515.2236
Daily Ambient Temp. Range (deg. R):	19.1000
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9996
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0005

Vapor Space Outage (ft):	12.7528
Working Losses (lb):	0.7302
Vapor Molecular Weight (lb/lb-mole):	130.2300
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0005
Annual Net Throughput (gal/yr.):	484,167.0000
Annual Turnovers:	40.5394
Turnover Factor:	0.9067
Maximum Liquid Volume (gal):	11,943.1182
Maximum Liquid Height (ft):	16.8000
Tank Diameter (ft):	11.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	0.9233

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

TS-1027-2EH - Vertical Fixed Roof Tank
Hammond, Indiana

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
2-Ethylhexanol	0.73	0.19	0.92



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

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

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

DATE: March 26, 2013

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

SUBJECT: Final Decision
Administrative Amendment
089-32930-00227

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:
Mike Prising – Ops Manager
Christa O. Russell – Schreiber Yonley and Assc.
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	GHOTOPP 3/26/2013 Dover Chemical - Hammond Works 089-32930-00227 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) via confirmed delivery										
2		Mike Prising 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		Mr. Peter Engelbert 7542 New Hampshire Avenue Hammond IN 46323 (Affected Party)										
10		Dennis Jancosek 234 Oakwood Street Hammond IN 46324 (Affected Party)										
11		Mr. Wayne Sandefur 1231 177th Place Hammond IN 46324 (Affected Party)										
12		Mr. Bill Simmons 6326 Van Buren Avenue Hammond IN 46324 (Affected Party)										
13		Ms. Dorothy Alabach 647 North 125 West Valparaiso IN 46385 (Affected Party)										
14		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 (Affected Party)										
15		Ms. Nancy Orlando 1947 Wespark Avenue Whiting IN 46394 (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.
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1		J. Rogina 2718 White Oak Avenue Whiting IN 46394 (Affected Party)										
2		D. Atteberry 2701 Achrage Whiting IN 46394 (Affected Party)										
3		Mr. Ed Dybel 2440 Schrage Avenue Whiting IN 46394 (Affected Party)										
4		Mr. Steve Zabroski PO Box 524 Whiting IN 46394 (Affected Party)										
5		Mr. Robert Binder 7608 West 163 Street Tinley Park IL 60477 (Affected Party)										
6		Mark Coleman 107 Diana Road Portage IN 46368 (Affected Party)										
7		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)										
8		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
9		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
10		Ms. Christa O. Russell Schreiber Yonley and Assoc. 5829 Haverford Avenue Indianapolis IN 46220 (Consultant)										
11		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										
12		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)										
13		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)										
14		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)										
15		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (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.
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1		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)										
2		Ron Novak Hammond Dept. of Environmental Management 5925 Calumnet Ave. Hammond IN 46320 (Local Official)										
3		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)										
4		Dubois Public Library 1835 Broadway Gary IN 46407 (Library)										
5		Ryan Dave 939 Cornwallis Munster IN 46321 (Affected Party)										
6		Matt Mikus Post Tribune 1433 E 83rd Avenue Merrillville IN 46410 (Affected Party)										
7												
8												
9												
10												
11												
12												
13												
14												
15												

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