INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 04, 2006

RE: Pollution Control Industries, Inc. / 089-7738-00345

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:
(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

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

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

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

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

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

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

Enclosures
FNTVOP.dot 03/23/06

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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Pollution Control Industries, Inc.
4343 Kennedy Avenue
East Chicago, Indiana 46312

(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 2-3 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T089-7738-00345	
Issued by: Original signed by Nisha Sizemore for Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: April 04, 2006 Expiration Date: April 04, 2011

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

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 waste management and fuel processing source.

Responsible Official:	President
Source Address:	4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address:	4343 Kennedy Avenue, East Chicago, Indiana 46312
General Source Phone Number:	(219) 397-3951
SIC Code:	7389, 7399
County Location:	Lake
Source Location Status:	Nonattainment for PM2.5, 1-hr ozone and 8-hr ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source under PSD Major Source under Emission Offset Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

(1) HWM mix, blend, and storage tanks, identified as 1, 4, 18, 19, 20, 21, 22, and 23, with gallon capacities of 12,690, 12,690, 20,353, 20,353, 19,688, 20,353, 20,353, and 20,353, respectively, constructed in 1970, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using two (2) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.

(2) HWF receiving, blending and storage tank, identified as 29, with a capacity of 21,000 gallons, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 29.

(3) HWF blending and mixing tanks, identified as 6 and 7, with gallon capacities of 4,386 and 2,900, respectively, constructed in 1989 and 1952, respectively, collectively using one (1) carbon adsorber unit consisting of two (2) carbon canisters used alternately for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 6-7.

(4) One (1) hydropulper tank, identified as Tank 24 HP, constructed in 1993, with a capacity of 3,500 gallons.

(b) Hazardous waste fuel (HWF) receiving and shipping, identified as Unit 2, with a maximum capacity of 4,000 gallons of HWF per hour, constructed in 1991, using no controls, and consisting of the following operations:

(1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling; and

(2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and using bottom filling.

(c) One (1) materials manual lab packing, depacking, bulking and degassing operation identified as Unit 4, with a maximum capacity of 27,375 pack containers per year, constructed in 1992, including three insignificant booths in addition to the following equipment:

(1) One (1) booth for manual lab packing, depacking, bulking and degassing of organic materials, identified as Lab Pack Booth 1, using a single carbon canister for VOC control, and exhausting to stack LP S1.

(d) One (1) household hazardous waste (HHHW) drum shredder, identified as Unit 7, processing 125-pound drums at a capacity of 10 drums per hour, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, exhausting to one stack, identified as Small Shredder Stack, and exhausting indoors, which in turn exhausts through building vent V1.

(e) One (1) Solids Distillation System (SDS), constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

(1) One (1) SDS Shredder, using a carbon adsorption system for VOC control, exhausting to stack SDS ~~03~~ 01.

(2) One (1) Anaerobic Thermal Desorption System enclosed feed conveyor under nitrogen blanketing, using a carbon adsorption system for VOC control, exhausting to SDS 03.

(3) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 10 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

(4) One (1) Oil-Water Separator, using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(5) One (1) water tank, using a carbon adsorption system for VOC control, exhausting to stack SDS 08.

(6) One (1) Vapor Recovery Unit (VRU), using an open John Zink flare with a demister (and a carbon adsorption system as backup) for VOC control, exhausting to stack SDS 07.

(7) One (1) solids shaker and conveyor system, using a baghouse for particulate control, exhausting to stack SDS 04.

(f) One (1) Distillation Unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(g) One (1) condensed liquid tank, identified as Tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons, used to collect oil from the oil-water separator, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

(h) Three (3) product tanks, identified as Tanks 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

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

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

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

(b) Paved roads and parking lots with public access. [326 IAC 6-4]

(c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) booth for manual unpacking of dry chemical materials, identified as LP B4 of Unit 4, with a maximum capacity of 200 pounds per day, using a baghouse for particulate control, and exhausting to stack LP S4. [326 IAC 6-3-2]

(2) Two (2) packing booths, Lab Pack Booth 2 and Lab Pack Booth 3, used to handle acids and caustics, using a wet scrubber for control. [326 IAC 6-3-2]

(d) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) high speed non-hazardous aqueous dispersion tank, identified as Tank 25HD, constructed in 1993, with a capacity of 3,400 gallons. [326 IAC 8-9]

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 15-13-6(a)]

(a) This permit, T089-7738-00345, 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:

(1) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(2) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7]

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 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.6 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.7 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.8 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using 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.10 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 in letter form no later than April 15th of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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.11 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) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue
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).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 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 in 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.

(f) 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).

(g) 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)]

(h) 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.14 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 T089-7738-00345 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 combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

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 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

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

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

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

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 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 give (5) year basis, which document all such changes and emissions trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

(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 or 326 IAC 2-3-2.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
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) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "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, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality
100 North Senate Avenue
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 the certification by the “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 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

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

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

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

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:

(1) starting in 2007 and every three (3) years thereafter, and

(2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.

(b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

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

The statement must be submitted to:

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

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

(c) The emission statement 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.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-3]

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

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-3-1 (ll)) at a major source other than projects at a Clean Unit which is not part of a "major modification" (as defined in 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of "project" (as defined in 326 IAC 2-3-1 (ll)) 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 2-3-1(mm)(2)(A)(3); 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 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.17 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. 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-3-1 (ll)), 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 2-3-1 (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 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 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
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.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(b) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

(1) HWM mix, blend, and storage tanks, identified as 1, 4, 18, 19, 20, 21, 22, and 23, with gallon capacities of 12,690, 12,690, 20,353, 20,353, 19,688, 20,353, 20,353, and 20,353, respectively, constructed in 1970, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using two (2) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.

(2) HWF receiving, blending and storage tank, identified as 29, with a capacity of 21,000 gallons, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 29.

(3) HWF blending and mixing tanks, identified as 6 and 7, with gallon capacities of 4,386 and 2,900, respectively, constructed in 1989 and 1952, respectively, collectively using one (1) carbon adsorber unit consisting of two (2) carbon canisters used alternately for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 6-7.

(4) One (1) hydropulper tank, identified as Tank 24 HP, constructed in 1993, with a capacity of 3,500 gallons.

(b) Hazardous waste fuel (HWF) receiving and shipping, identified as Unit 2, with a maximum capacity of 4,000 gallons of HWF per hour, constructed in 1991, using no controls, and consisting of the following operations:

(1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling; and

(2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and using bottom filling.

(c) One (1) materials manual lab packing, depacking, bulking and degassing operation identified as Unit 4, with a maximum capacity of 27,375 pack containers per year, constructed in 1992, including three insignificant booths in addition to the following equipment:

(1) One (1) booth for manual lab packing, depacking, bulking and degassing of organic materials, identified as Lab Pack Booth 1, using a single carbon canister for VOC control, and exhausting to stack LP S1.

(d) One (1) household hazardous waste (HHHW) drum shredder, identified as Unit 7, processing 125-pound drums at a capacity of 10 drums per hour, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, exhausting to one stack, identified as Small Shredder Stack, and exhausting indoors, which in turn exhausts through building vent V1.

(e) One (1) Solids Distillation System (SDS), constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

SECTION D.1 FACILITY OPERATION CONDITIONS

(1) One (1) SDS Shredder, using a carbon adsorption system for VOC control, exhausting to stack SDS ~~03~~ 01.

(2) One (1) Anaerobic Thermal Desorption System enclosed feed conveyor under nitrogen blanketing, using a carbon adsorption system for VOC control, exhausting to SDS 03.

(3) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 10 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

(4) One (1) Oil-Water Separator, using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(5) One (1) water tank, using a carbon adsorption system for VOC control, exhausting to stack SDS 08.

(6) One (1) Vapor Recovery Unit (VRU), using an open John Zink flare with a demister (and a carbon adsorption system as backup) for VOC control, exhausting to stack SDS 07.

(7) One (1) solids shaker and conveyor system, using a baghouse for particulate control, exhausting to stack SDS 04.

(f) One (1) Distillation Unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(g) One (1) condensed liquid tank, identified as Tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons, used to collect oil from the oil-water separator, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

(h) Three (3) product tanks, identified as Tanks 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

Specifically Regulated Insignificant Activities

(d) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) high speed non-hazardous aqueous dispersion tank, identified as Tank 25HD, constructed in 1993, with a capacity of 3,400 gallons. [326 IAC 8-9]

(This 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 General Provisions relating to NESHAP [326 IAC 14-1][40 CFR Part 61, Subpart A][326 IAC 20-23][40 CFR Part 63, Subpart DD]

(a) The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply to the subject facilities described in this section except as otherwise specified in 40 CFR Part 61, Subpart J.

(b) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-23, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 63, Subpart DD, Table 2.

D.1.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) – Benzene Waste Operations [326 IAC 14-1][40 CFR Part 61, Subpart FF]

(a) The source shall not accept benzene-containing hazardous waste (as defined by 40 CFR 61.341) from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery.

(b) Any change or modification which results in the source accepting a benzene-containing hazardous waste from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery must receive prior approval from IDEM, OAQ.

D.1.3 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Offsite Waste and Recovery Operations [326 IAC 20-23] [40 CFR Part 63, Subpart DD]

(a) Pursuant to 40 CFR 63.683(b)(1), the Permittee shall comply with one of the following requirements for the off-site material management units, except for those units exempted under 40 CFR 63.683(b)(2).

(1) The Permittee shall control air emissions from the off-site material management unit in accordance with the applicable standards specified in 40 CFR 63.685 through 63.689.

(2) The Permittee shall remove or destroy HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in 40 CFR 63.684.

(3) The Permittee shall determine, before placing off-site material in the off-site material management unit, that the average Volatile Organic Hazardous Air Pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b). This initial determination must be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(b) Pursuant to 40 CFR 63.683(c)(1), the Permittee shall comply with one of the following for process vents, except for those units exempted under 40 CFR 63.683(c)(2).

(1) The Permittee shall control air emissions from each process vent in accordance with the standards specified in 40 CFR 63.690.

(2) The Permittee shall determine, before placing off-site material in the process equipment associated with the process vent, that the average VOHAP concentration of the off-site material is less than the ppmw at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b) before any portion of the off-site material stream is placed in the

unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(c) Pursuant to 40 CFR 63.683(d), the Permittee must control equipment leaks from each equipment component that is part of the affected source specified in 40 CFR 63.680(c)(3) by implementing leak detection and control measures in accordance with the standards specified in 40 CFR 63.691.

D.1.4 Emission Offset [326 IAC 2-3][326 IAC 8-1-6]

(a) The IDEM, OAQ has information that indicates that several facilities described in this section may be subject to the requirements of 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7. Specifically, IDEM, OAQ questions the efficiency of the capture system associated with the carbon controls on Lab Pack Booth 1 and HHHW shredder (Unit 7). Also, IDEM, OAQ has been unable to validate the source's calculations for stack emissions from these facilities. Therefore, the Permit Shield provided in Section B of this permit does not apply to Lab Pack Booth 1 or HHHW shredder (Unit 7) with regards to 326 IAC 2-3, 326 IAC 8-1-6 and 326 IAC 8-7. Once this matter is resolved, the OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to address the aforementioned rules, and a schedule for achieving compliance with any requirements.

(b) Pursuant to MSM 089-15970-00345, issued December 2, 2003, and MPM 089-18513-00345, issued February 2, 2004, and as revised by this Part 70 permit, the VOC emissions from the SDS shredder, Solids Distillation System and Distillation Unit shall not exceed the emission limits listed in the table below:

Unit ID	Stack(s) ID	VOC Emission Limit (lb/hr)
SDS Shredder	SDS 01	0.028
Solids Distillation System*	SDS 02, SDS 03, SDS 04, SDS 07 and SDS 08	0.169
Distillation Unit	SDS 05	0.014

* Not including the SDS Shredder

Compliance with these limits is equivalent to less than or equal to VOC emissions of 0.92 tons per year. Combined with the VOC emissions from product tanks 02 through 04, condensed liquid tank 01 and the insignificant combustion units, the VOC emissions from the modification permitted via MSM 089-15970-00345, issued December 2, 2003, are equal to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable to these units.

D.1.5 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the shaker and conveyor system section of the Solids Distillation System (exhausting to stack SDS 04) shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4 tons per hour.

The pounds per hour limitation were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9, the following applies to HWF mix blend and storage tanks 1, 4, 18, 19, 20, 21, 22, and 23, HWF blending and storage tanks 6 and 7, tank 24HP, tank 25HD, HWF receiving and storage tank 29, product tanks 02 through 04 and condensed liquid tank 01:

(a) The Permittee shall maintain records of the following for the life of each vessel:

(1) The vessel identification number;

(2) The vessel dimensions;

(3) The vessel capacity; and

(4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4(a) and 4(b), if applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4(b), if applicable, with a certification that the emission control equipment meets the applicable standards.

(b) A report containing the information described in (a) shall be submitted to IDEM, OAQ within 30 days of permit issuance.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 180 days after issuance of this Part 70 permit, in order to determine the applicability of 326 IAC 2-3, 326 IAC 8-1-6, and 326 IAC 8-7, the Permittee shall perform VOC testing on Lab Pack Booth and HHHW shredder (Unit 7). These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be performed to determine VOC capture and destruction efficiency and shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Condition D.1.4(b), the Permittee shall perform VOC testing on the SDS Shredder, Solids Distillation System and Distillation Unit no later than May 30, 2009. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.9 Emissions Controls

(a) In order to comply with Conditions D.1.3 and D.1.4(b), and except as otherwise provided by statute, rule or this permit:

(1) The respective carbon adsorbers/canisters shall be in operation and control VOC and HAP emissions at all times that the HWF storage tanks (Unit 1), Lab Pack Booth 1, HHHW shredder (Unit 7), SDS Shredder, ATDU feed conveyor, Oil-Water Separator, product tanks 01 through 04 and Distillation Unit are in operation.

(2) In the event that carbon adsorber failure is observed, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be

repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date on which the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) In order to comply with Condition D.1.4(b), and except as otherwise provided by statute, rule or this permit:

(1) The open flare or backup carbon adsorption system shall be in operation and control VOC and HAP emissions at all times that the VRU is in operation.

(2) In the event that flare failure and backup carbon adsorption system failure is observed, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date on which the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(c) In order to comply with Condition D.1.5:

(1) Except as otherwise provided by statute, rule or this permit, the baghouse shall be in operation and control particulate emissions at all times that the shaker and conveyor system section of the Anaerobic Thermal Desorption System is in operation.

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

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

D.1.10 Carbon Adsorber/Canister Monitoring

(a) The Permittee shall conduct inspections, at least once per day, of each carbon adsorber/canister control system that is in use when the respective facilities are in operation. Inspections shall be made at both the inlet and outlet of the control system. The inspections shall be for the detection of VOC with a portable analyzer. If the inspections indicate that the outlet concentration of VOC is greater than or equal to two percent (2%) of the inlet concentration of VOC, then the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. If this value is below the detection threshold of the portable analyzer, then the Permittee shall take such response steps upon the detection of VOC at the outlet. The detection of VOC at the outlet in exceedance of this threshold is not a deviation from this permit. However, failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) The instrument used for determining the presence of VOC at the inlet and outlet of the carbon adsorber systems shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once per operating day.

D.1.11 Flare Pilot Flame

(a) The presence of a flare pilot flame (for the flare controlling emissions from the VRU) shall be continuously monitored using a thermocouple, or any other equivalent device, to detect the presence of a flame. The Permittee shall perform troubleshooting contingency and corrective actions for when the presence of a flame is not detected while the VRU is in operation. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a violation of this permit.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.12 Visible Emissions Notations

(a) Once per day visible emission notations of the stack exhaust from the shaker and conveyor system section of the Solids Distillation System (exhausting to stack SDS 04) shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Permittee shall perform troubleshooting contingency and response steps when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.13 Parametric Monitoring

(a) The Permittee shall monitor the total static pressure drop across the baghouse used in conjunction with the shaker and conveyor system section of the Solids Distillation System, at least once per day when the shaker and/or conveyor system is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 8.0 and 14.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.14 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks from Fugitive Emission Sources of Benzene [326 IAC 14-1][40 CFR Part 61, Subpart J]

Pursuant to 40 CFR 61.110(c)(1) and 40 CFR 61.246(i), the Permittee shall record, in a readily accessible log, the following information for every unit in benzene service as defined in 40 CFR 61.111:

(a) An analysis demonstrating the design capacity of the process unit, and

(b) An analysis demonstrating that equipment is not in VHAP service.

D.1.16 Record Keeping Requirements [40 CFR Part 63, Subpart DD]

Pursuant to 40 CFR 63.696:

(a) The Permittee shall comply with the record keeping requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR Part 63, Subpart DD that apply to the affected sources and the chosen compliance method.

(b) The Permittee shall maintain records in accordance with the requirements of 40 CFR 63.10 for the control devices.

(c) For the tanks using fixed roofs to comply with the control requirements of 40 CFR 63.685, the Permittee shall prepare and maintain the following records:

(1) A record for each inspection required by 40 CFR 63.695(b), as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of the inspection.

(2) The owner or operator shall record for each defect detected during inspections required by 40 CFR 63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of the detection, and the corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provision of 40 CFR 63.695(b)(4), the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(d) For the tanks using an enclosure to comply with the control requirements of 40 CFR 63.685, the Permittee shall prepare and maintain records for the most recent set of calculations and measurements performed by the Permittee to verify that the tank enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B.

(e) The Permittee shall record, on a semiannual basis, the information specified as follows for those planned routine maintenance operations that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.

(1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of 40 CFR 63.693 (d) through (h), as applicable, due to planned routine maintenance.

(f) The Permittee shall record the information specified in 40 CFR 63.696(h)(1) through (h)(3) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.

D.1.17 Record Keeping Requirements

(a) To document compliance with Condition D.1.2, the Permittee shall maintain records demonstrating that benzene-containing wastes were not received from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the records specified in that condition.

(c) To document compliance with Condition D.1.10, the Permittee shall maintain records of the once per day inspections done with the portable VOC analyzer.

(d) To document compliance with Condition D.1.12, the Permittee shall maintain once per day records of the visible emission notations.

(e) To document compliance with Condition D.1.13, the Permittee shall maintain once per day records of the baghouse pressure drop readings.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.18 Reporting Requirements [40 CFR Part 63, Subpart DD]

(a) Pursuant to 40 CFR 63.697, the Permittee shall submit all of the notifications required by 40 CFR 63.9 as specified in Table 2 of 40 CFR Part 63, Subpart DD that apply to the affected source and chosen compliance method. This includes, but is not limited to, the following:

(1) The Permittee shall submit reports in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR Part 63, Subpart DD.

(2) The Permittee of a control device used to meet the requirements of 40 CFR 63.693 shall submit the following notifications and reports:

(A) A notification of performance tests specified in 40 CFR 63.7 and 40 CFR 63.9(g).

(B) Performance test reports specified in 40 CFR 63.10(d)(2).

(C) Startup, shutdown, and malfunction reports specified in 40 CFR 63.10(d)(5).

(D) A summary report specified in 40 CFR 63.10(e)(3) on a semiannual basis.

(b) The notifications required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

(b) Paved roads and parking lots with public access. [326 IAC 6-4]

(c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) booth for manual unpacking of dry chemical materials, identified as LP B4 of Unit 4, with a maximum capacity of 200 pounds per day, using a baghouse for particulate control, and exhausting to stack LP S4. [326 IAC 6-3-2]

(2) Two (2) packing booths, Lab Pack Booth 2 and Lab Pack Booth 3, used to handle acids and caustics, using a wet scrubber for control. [326 IAC 6-3-2]

(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 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), the particulate emissions from LP B4 of Unit 4, Lab Pack Booth 2 and Booth 3 shall not exceed 0.551 pounds per hour, each.

D.2.2 Cold Cleaner Operations [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, the Permittee shall comply with the following requirements for the insignificant cold cleaner degreasing operations:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.3 Cold Cleaner Degreaser Operation and Control [326 IAC 8-3-5]

Pursuant to 326 IAC 8-3-5, the Permittee shall comply with the following requirements with respect to the insignificant degreasing operations:

(a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(1) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F));

(2) The solvent is agitated; or

(3) The solvent is heated.

(b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

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

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

(3) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(f) Close the cover whenever articles are not being handled in the degreaser.

(g) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(h) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.2.4 Material Requirements for Cold Cleaning Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8, the Permittee must comply with the following requirements with respect to the insignificant degreasing operations:

(a) Pursuant to 326 IAC 8-3-8(c)(2)(B), the Permittee shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Pursuant to 326 IAC 8-3-8(d)(2), the Permittee shall maintain each of the following records for each purchase of solvents for use in the insignificant Heritage cold cleaning degreaser. These records shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

(1) The name and address of the solvent supplier.

(2) The date of purchase.

(3) The type of solvent.

(4) The volume of each unit of solvent.

(5) The total volume of the solvent.

(6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T089-7738-00345

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 BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T089-7738-00345

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- C The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Part 70 Permit No.: T089-7738-00345

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

Page 2 of 2

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:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Part 70 Permit

Source Background and Description

Source Name:	Pollution Control Industries, Inc.
Source Location:	4343 Kennedy Avenue, East Chicago, Indiana 46312
County:	Lake
SIC Code:	7389, 7399
Operation Permit No.:	T089-7738-00345
Permit Reviewer:	ERG/BS

On December 30, 2005, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) had a notice published in the East Chicago Public Library stating that Pollution Control Industries, Inc. ("PCI") had applied for a Part 70 Permit relating to the operation of a waste management and fuel processing source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 26, 2006, PCI submitted comments on the proposed Part 70 Permit. A summary of the comments, and the corresponding OAQ responses, is contained in this document. Text with a line through it has been deleted and bold text has been added. The Table of Contents has been updated as necessary.

Comment 1:

Condition A.2(a)(1) and the facility description in Section D.1: The size for Tank 20 should be changed to 19,688 gallons.

Response to Comment 1:

The following changes have been made in response to this comment:

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

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

(a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

(1) HWM mix, blend, and storage tanks, identified as 1, 4, 18, 19, 20, 21, 22, and 23, with gallon capacities of 12,690, 12,690, 20,353, 20,353, ~~20,353~~ **19,688**, 20,353, 20,353, and 20,353, respectively, constructed in 1970, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using two (2) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.

…

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

(1) HWM mix, blend, and storage tanks, identified as 1, 4, 18, 19, 20, 21, 22, and 23, with gallon capacities of 12,690, 12,690, 20,353, 20,353, ~~20,353~~ **19,688**, 20,353, 20,353, and 20,353, respectively, constructed in 1970, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using two (2) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.

…

Comment 2:

(1) Condition A.2(c) and facility description in Section D.1: The description should be changed to read as follows to more accurately describe the unit:

"One (1) materials manual lab packing, depacking, bulking and degassing operation identified as:

One (1) booth for manual lab packing, depacking, bulking and degassing of organic materials, identified as Lab Pack Booth 1, using …"

(2) Condition A.2(d) and facility description in Section D.1: The description should be changed to read as follows to more accurately describe the unit:

"One (1) household hazardous waste (HHHW) drum shredder …"

(3) Condition A.2(e) and (f) and facility description in Section D.1: Since the equipment described in these conditions is all part of the Solids Distillation System, the descriptions should be changed to read as follows to more accurately describe the unit:

(e) One (1) Solids Distillation System (SDS), constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

(1) One (1) SDS Shredder, identified as SDS Shredder, using a carbon adsorption system for VOC control, exhausting to stack SDS 01.

(2) One (1) Anaerobic Thermal Desorption Unit enclosed feed conveyor under nitrogen blanketing, using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(3) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 10 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

(4) One (1) oil-water separator, using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(5) One (1) water tank, using a carbon adsorption system for VOC control, exhausting to stack SDS 08.

(6) One (1) Vapor Recovery Unit (VRU), using an open John Zink flare with a demister (and a carbon adsorption system as backup) for VOC control, exhausting to stack SDS 07.

(7) One (1) solids shaker and conveyor system, using a baghouse for particulate control, exhausting to stack SDS 04.

(4) Condition A.3(c)(1) and facility description in Section D.2: The description should be changed to read as follows to more accurately describe the unit:

"One (1) booth for manual lab packing, depacking, bulking and degassing of dry chemical materials, identified as Lab Pack Booth 4, with a maximum …"

(5) Condition A.3(c)(2) and facility description in Section D.2: The description should be changed to read as follows to more accurately describe the units:

"Two (2) booths for manual lab packing, depacking, bulking and degassing operations, identified as Lab Pack Booth 2 and Lab Pack Booth 3, used to handle acids and caustics …"

Response to Comment 2:

The following changes have been made in response to this comment:

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

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

…

(c) One (1) ~~laboratory~~ materials manual **lab packing, depacking, bulking and degassing** ~~unpacking~~ operation ~~(Lab Pack/Depack)~~, identified as Unit 4, with a maximum capacity of 27,375 pack containers per year, constructed in 1992, including three insignificant booths in addition to the following equipment:

(1) One (1) booth for manual **lab packing, depacking, bulking and degassing** ~~unpacking~~ of organic materials, identified as **Lab Pack Booth 1** ~~LP B1~~, using a single carbon canister for VOC control, and exhausting to stack LP S1.

(d) One (1) **household** hazardous ~~household~~ waste (HHHW) drum shredder, identified as Unit 7, processing 125-pound drums at a capacity of 10 drums per hour, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, exhausting to one stack, identified as Small Shredder Stack, and exhausting indoors, which in turn exhausts through building vent V1.

~~(e) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, using a carbon adsorption system for VOC control, and exhausting to stack SDS 01.~~

(~~f~~**e**) One (1) ~~Anaerobic Thermal Desorption System~~ **Solids Distillation System (SDS)**, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

(1) One (1) **SDS Shredder** ~~ATDU feed conveyor~~, using a carbon adsorption system for VOC control, exhausting to stack SDS ~~03~~ **01**.

(2) One (1) Anaerobic Thermal Desorption System enclosed feed conveyor under nitrogen blanketing, using a carbon adsorption system for VOC control, exhausting to SDS 03.

(~~2~~**3**) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 10 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

(~~3~~**4**) One (1) **O**il-**W**ater **S**eparator, ~~including water tank,~~ using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(5) One (1) water tank, using a carbon adsorption system for VOC control, exhausting to stack SDS 08.

(~~4~~**6**) One (1) Vapor Recovery Unit (VRU), using an open John Zink flare with a demister (and a carbon adsorption system as backup) for VOC control, exhausting to stack SDS 07.

(~~5~~**7**) One (1) solids shaker and conveyor system, using a baghouse for particulate control, exhausting to stack SDS 04.

(~~g~~**f**) One (1) Distillation Unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(~~h~~**g**) One (1) condensed liquid tank, identified as Tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons, used to collect oil from the oil-water separator, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

(~~i~~**h**) Three (3) product tanks, identified as Tanks 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

…

(c) One (1) ~~laboratory~~ materials manual **lab packing, depacking, bulking and degassing** ~~unpacking~~ operation ~~(Lab Pack/Depack)~~, identified as Unit 4, with a maximum capacity of 27,375 pack containers per year, constructed in 1992, including three insignificant booths in addition to the following equipment:

(1) One (1) booth for manual **lab packing, depacking, bulking and degassing** ~~unpacking~~ of organic materials, identified as **Lab Pack Booth 1** ~~LP-B1~~, using a single carbon canister for VOC control, and exhausting to stack LP S1.

(d) One (1) **household** hazardous ~~household~~ waste (HHHW) drum shredder, identified as Unit 7, processing 125-pound drums at a capacity of 10 drums per hour, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, exhausting to one stack, identified as Small Shredder Stack, and exhausting indoors, which in turn exhausts through building vent V1.

~~(e) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, using a carbon adsorption system for VOC control, and exhausting to stack SDS 01.~~

(~~f~~**e**) One (1) ~~Anaerobic Thermal Desorption System~~ **Solids Distillation System (SDS)**, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

(1) One (1) **SDS Shredder** ~~ATDU feed conveyor~~, using a carbon adsorption system for VOC control, exhausting to stack SDS ~~03~~ **01**.

SECTION D.1 FACILITY OPERATION CONDITIONS

(2) One (1) Anaerobic Thermal Desorption System enclosed feed conveyor under nitrogen blanketing, using a carbon adsorption system for VOC control, exhausting to SDS 03.

(~~2~~**3**) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 10 MMBtu/hr natural gas fired heater, exhausting to stack SDS 02.

(~~3~~**4**) One (1) **O**il-**W**ater **S**eparator, ~~including water tank,~~ using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(5) One (1) water tank, using a carbon adsorption system for VOC control, exhausting to stack SDS 08.

(~~4~~**6**) One (1) Vapor Recovery Unit (VRU), using an open John Zink flare with a demister (and a carbon adsorption system as backup) for VOC control, exhausting to stack SDS 07.

(~~5~~**7**) One (1) solids shaker and conveyor system, using a baghouse for particulate control, exhausting to stack SDS 04.

(~~g~~**f**) One (1) Distillation Unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(~~h~~**g**) One (1) condensed liquid tank, identified as Tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons, used to collect oil from the oil-water separator, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

(~~i~~**h**) Three (3) product tanks, identified as Tanks 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

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

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):

…

(c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) booth for manual **lab packing, depacking, bulking and degassing of** ~~unpacking of~~ dry chemical materials, identified as **Lab Pack Booth 4** ~~LP B4 of Unit 4~~, with a maximum capacity of 200 pounds per day, using a baghouse for particulate control, and exhausting to stack LP S4. [326 IAC 6-3-2]

(2) Two (2) ~~packing~~ booths **for manual lab packing, depacking bulking and degassing operations**, Lab Pack Booth 2 and Lab Pack Booth 3, used to handle

acids and caustics, using a wet scrubber for control. [326 IAC 6-3-2]

…

SECTION D.2 FACILITY OPERATION CONDITIONS

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

…

(c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) booth for manual **lab packing, depacking, bulking and degassing of** ~~unpacking of~~ dry chemical materials, identified as **Lab Pack Booth 4** ~~LP B4 of Unit 4~~, with a maximum capacity of 200 pounds per day, using a baghouse for particulate control, and exhausting to stack LP S4. [326 IAC 6-3-2]

(2) Two (2) ~~packing~~ booths, **for manual lab packing, depacking bulking and degassing operations** Lab Pack Booth 2 and Lab Pack Booth 3, used to handle acids and caustics, using a wet scrubber for control. [326 IAC 6-3-2]

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

…

D.1.4 Emission Offset [326 IAC 2-3][326 IAC 8-1-6]

(a) The IDEM, OAQ has information that indicates that several facilities described in this section may be subject to the requirements of 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7. Specifically, IDEM, OAQ questions the efficiency of the capture system associated with the carbon controls on **Lab Pack Booth 1** ~~the Lab Pack/Depack Booth (LP B1 of Unit 4)~~ and HHHW shredder (Unit 7). Also, IDEM, OAQ has been unable to validate the source's calculations for stack emissions from these facilities. Therefore, the Permit Shield provided in Section B of this permit does not apply to **Lab Pack Booth 1** ~~the Lab Pack/Depack Booth (LP B1 of Unit 4)~~ or HHHW shredder (Unit 7) with regards to 326 IAC 2-3, 326 IAC 8-1-6 and 326 IAC 8-7. Once this matter is resolved, the OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include detailed requirements necessary to address the aforementioned rules, and a schedule for achieving compliance with any requirements.

(b) Pursuant to MSM 089-15970-00345, issued December 2, 2003, and MPM 089-18513-00345, issued February 2, 2004, and as revised by this Part 70 permit, the VOC emissions from the SDS shredder, **Solids Distillation System** ~~Anaerobic Thermal Desorption System~~ and Distillation Unit shall not exceed the emission limits listed in the table below:

Unit ID	Stack(s) ID	VOC Emission Limit (lb/hr)
SDS Shredder	SDS 01	0.028
Solids Distillation System * ~~Anaerobic Thermal Desorption System~~	**SDS 02,** SDS 03, **SDS 04,** SDS 07 and SDS 08	0.169
Distillation Unit	SDS 05	0.014

*** Not including the SDS Shredder**

…

D.1.5 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the shaker and conveyor system section of the **Solids Distillation System** ~~Anaerobic Thermal Desorption System~~ (exhausting to stack SDS 04) shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4 tons per hour.

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within 180 days after issuance of this Part 70 permit, in order to determine the applicability of 326 IAC 2-3, 326 IAC 8-1-6, and 326 IAC 8-7, the Permittee shall perform VOC testing on **Lab Pack Booth 1** ~~the Lab Pack/Depack Booth (LP B1 of Unit 4)~~ and HHHW shredder (Unit 7). These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be performed to determine VOC capture and destruction efficiency and shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Condition D.1.4(b), the Permittee shall perform VOC testing on the SDS Shredder, **Solids Distillation System** ~~Anaerobic Thermal Desorption System~~ and Distillation Unit no later than May 30, 2009. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.9 Emissions Controls

(a) In order to comply with Conditions D.1.3 and D.1.4(b), and except as otherwise provided by statute, rule or this permit:

(1) The respective carbon adsorbers/canisters shall be in operation and control VOC and HAP emissions at all times that the HWF storage tanks (Unit 1), ~~Lab Pack/Depack Booth (LP B1 of Unit 4)~~ **Lab Pack Booth 1**, HHHW shredder (Unit 7), SDS Shredder, ATDU feed conveyor, **Oil-Water Separator, product tanks 01 through 04** and Distillation Unit are in operation.

…

D.1.12 Visible Emissions Notations

(a) Once per day visible emission notations of the stack exhaust from the shaker and conveyor system section of the **Solids Distillation System** ~~Anaerobic Thermal Desorption System~~ (exhausting to stack SDS 04) shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

…

D.1.13 Parametric Monitoring

(a) The Permittee shall monitor the total static pressure drop across the baghouse used in conjunction with the shaker and conveyor system section of the **Solids Distillation System** ~~Anaerobic Thermal Desorption System~~, at least once per day when the shaker and/or conveyor system is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

…

Comment 3:

Condition D.1.4(a): This condition states that IDEM is unable to determine the applicability of certain rules with respect to Lab Pack Booth 1 and the HHHW Shredder. PCI has provided IDEM with data supporting its belief that these emission points represent relatively minor sources of VOC/HAP emissions and has expressed a willingness to accept permit conditions (such as requiring the use of carbon canister controls systems and limitations on the operation of the HHHW shredder) to clarify that the rules in question are not applicable to these operations. As noted in previous correspondence, Lab Pack Booth 1 simply involves the transfer (through manual pouring) of materials in small lab containers into compatible larger containers. PCI maintains records of the type and quantity of materials handled in this booth which it believes can provide a reasonable estimate of VOC/HAP emissions. The HHHW shredder was installed as a supplemental environmental project to allow PCI to segregate the small quantities of waste which are collected through household hazardous waste programs to be analyzed prior to combining with other, larger volume, waste streams at the facility. This unit is used intermittently in conjunction with these programs. PCI also notes that household hazardous waste processing units are exempt from MACT requirements under 40 CFR 63.680(b)(2)(i) and (iv). PCI believes that this further supports its contention that emissions from this unit are relatively small. PCI requests that IDEM re-examine data provided to ensure that applicability determinations are not possible for these units.

Response to Comment 3:

As stated in Condition D.1.4 (a), IDEM is unable to determine the applicability of several rules with respect to Lab Pack Booth 1 and the HHHW Shredder because PCI has been unable to accurately and sufficiently quantify the VOC emissions from those units. Specifically, the magnitude of the uncontrolled VOC emissions and the extent of the capture and adsorption efficiencies of the emission controls have not been sufficiently validated by PCI. In order to determine rule applicability appropriately, IDEM will need comprehensive data and detailed emission estimates. IDEM has not received adequate information to satisfy this issue. The emission calculations included in Appendix A of the Technical support document were completed by IDEM and represent an estimate of the VOC emissions from the respective units. However, this estimate is not sufficient for the purpose of evaluating the applicability of 326 IAC 2-3, 326 IAC 8-1-6 and 326 IAC 8-7. Therefore, Conditions D.1.4 and D.1.8 (a) were added to (and will remain in) the permit to ensure that the VOC emissions from Lab Pack Booth 1 and HHHW Shredder are adequately quantified. In order to determine the level of emissions, stack testing will be required as specified in D.1.8 (a). These tests will determine the level of emissions based on worst case operating scenario from the Lab Pack Booth and HHHW shredder (Unit 7. This test information will then allow IDEM to appropriately address 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7. No change was made to the permit in response to this comment.

Comment 4:

Condition D.1.6: Tank HD25 (insignificant activity, in TSD but not in permit) is subject to Condition D.1.6 and should replace the “tank 25HP” typo.

Response to Comment 4:

The following changes have been made to include tank 25HD in Section A.3, the facility description in D.1, and Condition D.1.6:

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):

…

(d) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or

25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) high speed non-hazardous aqueous dispersion tank, identified as Tank 25HD, constructed in 1993, with a capacity of 3,400 gallons. [326 IAC 8-9]

SECTION D.1 FACILITY OPERATION CONDITIONS

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

…

Specifically Regulated Insignificant Activities

(d) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) high speed non-hazardous aqueous dispersion tank, identified as Tank 25HD, constructed in 1993, with a capacity of 3,400 gallons. [326 IAC 8-9]

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

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9] [326 IAC 12]

Pursuant to 326 IAC 8-9 and 326 IAC 12, the following applies to HWF mix blend and storage tanks 1, 4, 18, 19, 20, 21, 22, and 23, HWF blending and storage tanks 6 and 7, tank 24HP, tank 25~~HP~~**HD**, HWF receiving and storage tank 29, product tanks 02 through 04 and condensed liquid tank 01:

...

Comment 5:

Condition D.1.6(a): The word “and” should be removed from the end of item (a)(2) and placed at the end of item (a)(3).

Response to Comment 5:

The following changes have been made in response to this comment. In addition, 326 IAC 12 no longer applies to the tanks at PCI. Therefore, this reference has been deleted.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9] ~~[326 IAC 12]~~

Pursuant to 326 IAC 8-9 ~~and 326 IAC 12~~, the following applies to HWF mix blend and storage tanks 1, 4, 18, 19, 20, 21, 22, and 23, HWF blending and storage tanks 6 and 7, tank 24HP, tank 25~~HP~~**HD**, HWF receiving and storage tank 29, product tanks 02 through 04 and condensed liquid tank 01:

(a) The Permittee shall maintain records of the following for the life of each vessel:

(1) The vessel identification number;

(2) The vessel dimensions; ~~and~~

(3) The vessel capacity~~.~~**; and**

…

Comment 6:

Condition D.1.6(b): This condition requires that a report be submitted to IDEM related to identified vessels at the facility, however there is no indication of when this report is due or how often it is to be submitted. The information required is the vessel ID number, the vessel dimensions, the vessel capacity, and a description of the controls for each vessel (including a certification that the controls meet the applicable standards). The information required under this condition was provided to IDEM as a part of PCI's Title V permit application (PCI will provide updated data for Tank 20). Because this information has already been provided to IDEM, remove Condition D.1.6(b) from its permit. In the event that this condition is retained in the permit, please identify the date by which the referenced report is to be submitted and clarify if the report is to be resubmitted on a periodic basis or not.

Response to Comment 6:

The following changes have been made in response to this comment:

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9]

…

(b) A report containing the information described in (a) shall be submitted to IDEM, OAQ **within thirty (30) days of permit issuance**.

Comment 7:

Condition D.1.8(a): This condition requires that stack testing be performed on Lab Pack Booth 1 and on the HHHW shredder, and that these tests be repeated every five (5) years. As noted in its comments above, PCI believes that it has provided sufficient data to estimate emissions from these units, and does not believe that such testing is necessary. At a minimum, IDEM must remove the requirement to retest these units every five years, as these tests are simply being performed to determine rule applicability.

Response to Comment 7:

See Response to Comment 3. Once the issue has been adequately addressed, IDEM will revise the testing requirements in Condition D.1.8(a) as needed.

No change was made to the permit in response to this comment.

Comment 8:

Condition D.1.13: Please revise the normal range of the pressure drop for the baghouse to reflect its actual range of 8.0 to 14.0 inches of water.

Response to Comment 8:

The following changes have been made in response to this comment:

D.1.13 Parametric Monitoring

(a) The Permittee shall monitor the total static pressure drop across the baghouse used in conjunction with the shaker and conveyor system section of the Anaerobic Thermal Desorption System, at least once per day when the shaker and/or conveyor system is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~2.0 and 8.0~~ **8.0 to 14.0** inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take

response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

…

Comment 9:

Condition D.1.15: Please add the phrase "as defined in 40 CFR 61.111" to the end of the first sentence, which ends "… for every unit in benzene service", so that the term "in benzene service" is properly defined.

Response to Comment 9:

The following changes have been made in response to this comment:

D.1.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks from Fugitive Emission Sources of Benzene [326 IAC 14-1][40 CFR Part 61, Subpart J]

Pursuant to 40 CFR 61.110(c)(1) and 40 CFR 61.246(i), the Permittee shall record, in a readily accessible log, the following information for every unit in benzene service **as defined in 40 CFR 61.111**:

…

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Pollution Control Industries, Inc.
Source Location: 4343 Kennedy Avenue, East Chicago, Indiana 46312
County: Lake
SIC Code: 7389, 7399
Operation Permit No.: T089-7738-00345
Permit Reviewer: ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit application from Pollution Control Industries, Inc. (PCI) relating to the operation of a stationary waste management and fuel processing source.

This Part 70 operating permit contains provisions intended to satisfy the requirements of the construction permit rules.

History

PCI began operation in 1986, after purchasing the premises and various equipment from Synthetic Energy Products of America.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) Hazardous waste material (HWM) tank storage, identified as Unit 1, described as follows:

(1) HWM mix, blend, and storage tanks, identified as 1, 4, 18, 19, 20, 21, 22, and 23, with gallon capacities of 12,690, 12,690, 20,353, 20,353, 20,353, 20,353, 20,353, and 20,353, respectively, constructed in 1970, 1970, 1993, 1993, 1993, 1993, 1993, and 1993, respectively, collectively using two (2) sets of carbon adsorbers with the sets used alternately, each set with two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to one stack, identified as HWM Storage/Blending Stack.

(2) HWF receiving, blending and storage tank, identified as 29, with a capacity of 21,000 gallons, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, and exhausting to stack TK 29.

(3) HWF blending and mixing tanks, identified as 6 and 7, with gallon capacities of 4,386 and 2,900, respectively, constructed in 1989 and 1952, respectively, collectively using one (1) carbon adsorber unit consisting of two (2) carbon canisters used alternately for VOC control, using a nitrogen blanketing closed-

loop vapor exchange system to minimize air emissions, and exhausting to stack TK 6-7.

(4) One (1) hydropulper tank, identified as Tank 24HP, constructed in 1993, with a capacity of 3,500 gallons.

(b) Hazardous waste fuel (HWF) receiving and shipping, identified as Unit 2, with a maximum capacity of 4,000 gallons of HWF per hour, constructed in 1991, using no controls, and consisting of the following operations:

(1) Loading and unloading of railcars, occurring outdoors and unenclosed, and using submerged filling; and

(2) Loading and unloading of tank trucks, occurring semi-enclosed in a three-sided shed, and using bottom filling.

(c) One (1) laboratory materials manual unpacking operation (Lab Pack/Depack), identified as Unit 4, with a maximum capacity of 27,375 pack containers per year, constructed in 1992, including three insignificant booths in addition to the following equipment:

(1) One (1) booth for manual unpacking of organic materials, identified as LP B1, using a single carbon canister for VOC control, and exhausting to stack LP S1.

(d) One (1) hazardous household waste (HHHW) drum shredder, identified as Unit 7, processing 125-pound drums at a capacity of 10 drums per hour, constructed in 2000, using one (1) carbon adsorber unit consisting of two (2) carbon canisters in series for VOC control, using a nitrogen blanketing closed-loop vapor exchange system to minimize air emissions, exhausting to one stack, identified as Small Shredder Stack, and exhausting indoors, which in turn exhausts through building vent V1.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(e) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, using a carbon adsorption system for VOC control, and exhausting to stack SDS 01.

(f) One (1) Anaerobic Thermal Desorption System, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, consisting of:

(1) One (1) ATDU feed conveyor, using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(2) One (1) Anaerobic Thermal Desorption Unit, identified as ATDU, with one (1) 10 MMBtu/hr natural gas fired heater exhausting to stack SDS 02.

(3) One (1) oil-water separator, including water tank, using a carbon adsorption system for VOC control, exhausting to stack SDS 03.

(4) One (1) Vapor Recovery Unit (VRU), using an open John Zink flare with a demister (and a carbon adsorption system as backup) for VOC control, exhausting to stack SDS 07.

(5) One (1) solids shaker and conveyor system, using a baghouse for particulate control, exhausting to stack SDS 04.

(g) One (1) Distillation Unit, constructed in 2004, with a maximum throughput rate of 1.0 ton of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.

(h) One (1) condensed liquid tank, identified as Tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons, used to collect oil from the oil-water separator, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

(i) Three (3) product tanks, identified as Tanks 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons, controlled by a carbon adsorption system, and exhausting to stack SDS 08.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-5][326 IAC 8-3-8]

(b) Paved roads and parking lots with public access. [326 IAC 6-4]

(c) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 0.6 tons per year Pb; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) One (1) booth for manual unpacking of dry chemical materials, identified as LP B4 of Unit 4, with a maximum capacity of 200 pounds per day, using a baghouse for particulate control, and exhausting to stack LP S4. [326 IAC 6-3-2]

(2) Two (2) packing booths, Lab Pack Booth 2 and Lab Pack Booth 3, used to handle acids and caustics, using a wet scrubber for control. [326 IAC 6-3-2]

(3) One (1) high speed non-hazardous aqueous dispersion tank, identified as Tank 25HD, constructed in 1993, with a capacity of 3,400 gallons.

(4) One (1) SSI hydraulic non-hazardous waste shredder, identified as Unit 8, constructed in 2003, processing 125-pound drums at a capacity of 250 drums per eight hours, using no controls, and exhausting to a vent.

(5) Three (3) 12,000 gal in-ground storage basins. The basins store shredded non-hazardous materials mixed with purchased sawdust until the materials are shipped off-site to a landfill.

(e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: One (1) 2.5 MMBtu/hr natural gas-fired oil heater.

(f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(g) Combustion source flame safety purging on startup.

(h) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(i) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

(j) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

(k) Cleaners and solvents characterized as follows:

Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degF) or;

Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 degC (68 degF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(l) Closed loop heating and cooling systems.

(m) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs: One (1) recovered water tank, identified as tank 05, constructed in 2004, with a maximum capacity of 12,000 gallons. The VOC content in the recovered water is less than 1% by volume.

(n) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.

(o) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(p) Heat exchanger cleaning and repair.

(q) Process vessel degreasing and cleaning to prepare for internal repairs.

(r) Asbestos abatement projects regulated by 326 IAC 14-10.

(s) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(t) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(u) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(v) On-site fire and emergency response training approved by the department.

(w) Purge double block and bleed valves.

(x) Filter or coalescer media changeout.

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

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

(a) City of East Chicago, Indiana, Department of Air Quality (DAQ) Operation Permit (OP) 1, expired 12/31/88;

(b) City of East Chicago, Indiana, DAQ OP 2, expired 12/31/88;

(c) City of East Chicago, Indiana, DAQ OP 3, expired 12/31/88;

(d) City of East Chicago, Indiana, DAQ OP 4, expired 12/31/88;

(e) City of East Chicago, Indiana, DAQ OP 5, expired 12/31/88;

(f) City of East Chicago, Indiana, DAQ OP 6, expired 12/31/88;

(g) City of East Chicago, Indiana, DAQ OP 7, expired 12/31/88;

(h) City of East Chicago, Indiana, DAQ OP 8, expired 12/31/88;

(i) City of East Chicago, Indiana, DAQ OP 9, expired 12/31/88;

(j) City of East Chicago, Indiana, DAQ OP 10, expired 12/31/88;

(k) City of East Chicago, Indiana, DAQ OP 11, expired 12/31/88;

(l) City of East Chicago, Indiana, DAQ OP 12, expired 12/31/88;

(m) R089-2360-00345, issued August 1, 1990;

(n) Temporary Operation 089-16589-00345, issued September 25, 2002;

(o) MSM 089-15970-00345, issued December 2, 2003;

(p) MPM 089-18513-00345, issued February 2, 2004; and

(q) MPM 089-21209-00345, issued July 11, 2005.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

(a) Condition D.1.7 from MSM 089-15970-00345, issued December 2, 2003, and revised by MPM 089-18513-00345, issued February 2, 2004:

In order to make the requirements of 326 IAC 2-3 (Emission Offset) not applicable, the VOC emissions from the SDS shredder, the ATDU, and the distillation unit shall not exceed the emission limits listed in the table below:

Unit	VOC Emission Limit (lbs/hr)
SDS Shredder	0.028
ATDU - Carbon Adsorption System (SDS 03)	0.169
Distillation Unit	0.014

This is equivalent to 0.92 tons/yr VOC emissions from these units. Combined with the emissions from the tanks and the combustion units, the emissions from this modification are limited to less than 25 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

Revised Condition:

Pursuant to MSM 089-15970-00345, issued December 2, 2003, and MPM 089-18513-00345, issued February 2, 2004, and as revised by this Part 70 permit, the VOC emissions from the SDS shredder, Anaerobic Thermal Desorption System and Distillation Unit shall not exceed the emission limits listed in the table below:

Unit ID	Stack(s) ID	VOC Emission Limit (lb/hr)
SDS Shredder	SDS 01	0.028
Anaerobic Thermal Desorption System	SDS 03, SDS 07 and SDS 08	0.169
Distillation Unit	SDS 05	0.014

Compliance with these limits is equivalent to less than or equal to VOC emissions of 0.92 tons per year. Combined with the VOC emissions from product tanks 02 through 04, condensed liquid tank 01 and the insignificant combustion units, the VOC emissions from the modification permitted via MSM 089-15970-00345, issued December 2, 2003, are less than 25 tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable to these units.

Reason revised:

Neither the structure nor the magnitude of the limit has changed. Instead, the description of the affected units and identification of their stacks have been included for clarification. The actual configuration of the Anaerobic Thermal Desorption "Unit" (ATDU) differs from what was described when it was permitted via MSM 089-15970-00345, issued December 2, 2003. That approval indicated that VOC emissions from the modification exhausted from three single units: an Anaerobic Thermal Desorption Unit, a SDS Shredder and a Distillation Unit. However, the ATDU is actually a system, now identified as an Anaerobic Thermal Desorption System, which consists of several units, controls and exhausts. As a result, the limitation had to be revised to clarify which facilities it addresses.

(b) Conditions D.1.3, D.1.4, D.1.21 and D.1.24 from MPM 089-18513-00345, issued February 2, 2004:

The provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 14-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 61, Subpart FF.

Pursuant to 40 CFR 61.342(a), the Permittee is exempt from the requirements of 40 CFR 61.342(b) and (c), if the total annual benzene quantity from the facility waste does not exceed 11 tons per year. The total annual benzene from facility waste is defined as the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream shall be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene.

Pursuant to 40 CFR 61.342(g), compliance with 40 CFR 61, Subpart FF will be determined by review of the Permittee's records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355.

Pursuant to 40 CFR 61.356(a), the Permittee shall comply with the recordkeeping requirements in 40 CFR 61.356. Each record shall be maintained in a readily accessible

location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

Pursuant to 40 CFR 61.356(b), the Permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart.

Pursuant to 40 CFR 61.356(b)(1), for each waste stream not controlled for benzene emissions, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

Pursuant to 40 CFR 61.357(a), the Permittee shall submit, by the initial startup, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. The report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a).

(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF.

Pursuant to 40 CFR 61.357(c), if the total annual benzene quantity from facility waste is less than 11 ton/yr but is equal to or greater than 1.1 ton/yr, then the Permittee shall submit to IDEM, OAQ a report that updates the information specified in 61.357(b). The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 11 ton/yr or more. If the information submitted in the previous annual report is not changed in the following year, the Permittee may submit a statement to that effect.

The notifications required by paragraph (a) and (b) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Revised condition:

The source shall not accept benzene-containing hazardous waste (as defined by 40 CFR 61.341) from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery. Any change or modification which results in the source accepting a benzene-containing hazardous waste from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery must receive prior approval from IDEM,

OAQ. The Permittee shall maintain records sufficient to demonstrate that no benzene-containing hazardous wastes are accepted from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery.

Reason revised:
Pursuant to MPM 089-18513-00345, issued February 4, 2004 (which revised MSM 089-15970-00345, issued December 2, 2003), PCI was permitted to accept benzene-containing hazardous wastes from chemical manufacturing plants, coke by-product recovery plants, and/or petroleum refineries. As a result, PCI was subject to 40 CFR Part 61, Subpart FF and the appropriate requirements were included in the permit. However, during the development of this Part 70 permit, PCI notified the OAQ that it does not accept benzene-containing hazardous wastes from chemical manufacturing plants, coke by-product recovery plants, and/or petroleum refineries.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

(a) Condition D.1.5 from MSM 089-15970-00345, issued December 2, 2003 and MPM 089-21209-00345, issued July 11, 2005:
Pursuant to 40 CFR 60.116b, Subpart Kb (New Source Performance Standards for Volatile Organic Liquid Storage Vessels), tank 01 has the following requirements:

(1) Pursuant to 40 CFR 60.116b(b), the Permittee shall keep readily accessible records of the following for the life time of the source:

(A) the dimension of the storage vessel; and

(B) an analysis showing the capacity of the storage vessel.

(2) Pursuant to 40 CFR 60.116b(f)(A), prior to the initial filling of the vessel storing a waste mixture of indeterminate or variable composition, the Permittee shall determine the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored using the methods described in 40 CFR 60.116b(e).

Reason not incorporated:
Tank 01 (condensed liquid tank 01) has a storage capacity greater than 75 m^3 (19,813 gallons) but less than 151 m^3 (39,888 gallons) and stores volatile organic liquids with a maximum true vapor pressure less than 15.0 kPa. Therefore, pursuant to 40 CFR 60.110b(b), the requirements of 40 CFR Part 60, Subpart Kb are not included in the permit for condensed liquid tank 01. Note that the tank is subject to the requirements of 326 IAC 12; see the *State Rule Applicability – 326 IAC 12* section of this document for more information.

(b) All construction conditions from all previously issued permits.

Reason not incorporated:
All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Enforcement Issue

(a) IDEM, OAQ is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.* In addition, IDEM and the United States Environmental Protection Agency are currently

investigating concerns regarding constructing and operating without proper review under 326 IAC 2-3 (Emission Offset).

The OAQ and EPA are reviewing these matters and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

(b) Based on a review of the permit application, the IDEM, OAQ has concluded that the VOC emissions from several facilities at the source may be subject to the requirements of 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7, but have not been reviewed pursuant to the rules because the appropriate approvals were not received. Specifically, IDEM, OAQ has been unable to validate the source's calculations for stack emissions from Lab Pack/Depack (Unit 4), and the HHHW shredder (Unit 7).

This matter is currently being investigated by the IDEM, OAQ and U.S. EPA Region 5. This permit requires testing to quantify VOC emissions from Lab Pack/Depack (Unit 4), and the HHHW shredder (Unit 7). This information will be used to determine the applicability of 326 IAC 2-3, 326 IAC 8-1-6, and 326 IAC 8-7. This permit does not require testing of emissions from HWF Shipping (Unit 2) because the emissions are fugitive, and because the emissions estimates provided by the source are believed to be reasonable. Once this matter is resolved, the OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include: detailed requirements necessary to address the aforementioned rules, and a schedule for achieving compliance with any requirements.

Because it is anticipated that 326 IAC 2-3, 326 IAC 8-1-6, and/or 326 IAC 8-7 will be determined to be applicable after the investigation by IDEM, OAQ and the EPA, or that limits will be necessary to render the rules not applicable, monitoring of the carbon adsorbers is required by this permit. Monitoring shall be conducted in accordance with Section D and Section C - Compliance Monitoring of the permit.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 16, 1996. Additional information was received on May 27, 1998. A revised application was received on September 10, 1999. Additional information was also received on October 17, 2001, July 25, 2003, and June 14, 2005.

A notice of completeness letter was mailed to the source on February 11, 1997.

Emission Calculations

See Appendix A (pages 1-11) of this document for detailed emissions calculations. Please note that the emissions information was provided by the source and represents the best information available at this time. In order to obtain more accurate estimates and determine the applicability of several state rules, the Part 70 permit requires testing of numerous units at the source.

Potential to Emit of the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions 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, inclulding 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, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (ton/yr)
PM	Less than 250
PM-10	Less than 250
SO_2	0
VOC	Greater than 25, Less than 100
CO	0
NO_x	0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (ton/yr)
Any individual HAP	less than 10
TOTAL	greater than 25

Note: The emissions information provided by the source and used to arrive at these figures are considered by IDEM, OAQ to be reliable.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 25 tons per year and the source is located in Lake County. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
HWF Blending and Storage (Tanks): Unit 1	0	0	0	0.09	0	0	0.09
HWF Receiving and Shipping: Unit 2	0	0	0	18.0	0	0	18.0
Lab Pack/Depack: Unit 4 (LP B1)	0	0	0	Und. (a)	0	0	Und. (a)
HHHW Shredder: Unit 7	0	0	0	Und. (a)	0	0	Und. (a)
SDS Shredder	Negl.	Negl.	0	0.12 (c)	0	0	0
Anaerobic Thermal Desorption System	0.93	0.93	0.3	0.74 (c)	3.68	4.38	0.15
Distillation Unit	0	0	0	0.061 (c)	0	0	0.2
Condensed Liquid Tank 01	0	0	0	2.81 (b)	0	0	2.81 (b)
Product Tanks 02 through 04	0	0	0		0	0	
Insignificant Activities	0.08	0.08	0.01	0.6	0.92	1.1	Negl.
TOTAL	1.0	1.0	0.3	Greater than 25	4.6	5.5	Greater than 25

Negligible = Less than 0.1 tons per year.
(a) Und. = Undetermined. As explained in the *State Rule Applicability – 326 IAC 2-3* section of this document, IDEM, OAQ has concluded that the VOC emissions from the Lab Pack/Depack Booth (LP B1 of Unit 4) and HHHW shredder (Unit 7) may be subject to the requirements of 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7 but have not been reviewed pursuant to the rules because the appropriate approval was not received. Specifically, IDEM, OAQ has been unable to validate the source's calculations for emissions from the Lab Pack/Depack Booth (LP B1 of Unit 4) or the HHHW shredder (Unit 7). Therefore, the emissions presented in the table are un-validated estimates.
(b) According to the TSD for MSM 089-15970-00345, issued December 2, 2003, the VOC/HAP PTE of these tanks is 2.81 tpy. No emission calculations were provided.
(c) Pursuant to MSM 089-15970-00345, issued December 2, 2003, and MPM 089-18513-00345, issued February 2, 2004, and as revised by this Part 70 permit, the VOC emissions from these units are limited in order to render the requirements of 326 IAC 2-3 not applicable. The ton per year figures in the table are scaled-up equivalents of the pound per hour limitations. See the State Rule Applicability – 326 IAC 2-3 section of this document for more information.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not reported
PM-10	Not reported
SO_2	Not reported
VOC	5 **
CO	Not reported
NO_x	Not reported
HAP (specify)	Not reported

** - Not validated by the IDEM, OAQ.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM10	Attainment
PM2.5	Nonattainment
SO2	Primary nonattainment
1-hr Ozone	Severe Nonattainment
8-hr Ozone	Nonattainment
CO	Attainment
NO2	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.

(1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NOx threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Lake County has been designated as nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to 326 IAC 2-3 (Emission Offset). See the *State Rule Applicability – Entire Source* section of this document for more information.

(2) VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to 326 IAC 2-3 (Emission Offset). See the *State Rule Applicability – Entire Source* section of this document for more information.

(b) U.S.EPA, in Federal Register Notice 70 FR 943 dated January 5, 2005, designated Lake County as nonattainment for PM2.5. On March 7, 2005, the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to 326 IAC 2-3 (Emission Offset). See the *State Rule Applicability – Entire Source* section of this document for more information.

(c) The portion of Lake County in which this source is located is currently designated as primary nonattainment for SO2. Therefore, these emissions were reviewed pursuant to 326 IAC 2-3 (Emission Offset).

(d) Lake County has been classified as attainment or unclassifiable in Indiana for PM10, CO, NO2 and lead. Therefore, these emissions were reviewed pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)). See the *State Rule Applicability – Entire Source* section of this document for more information.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart K (New Source Performance Standard (NSPS)) are not included in the permit. None of the storage vessels at the source were constructed between June 11, 1973 and May 19, 1978.

(b) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart Ka (New Source Performance Standard (NSPS)) are not included in the permit. None of the storage vessels at the source were constructed between May 18, 1978 and July 23, 1984.

(c) The requirements of 326 IAC 12 and 40 CFR Part 60, Subpart Kb (as revised on October 15, 2003) (New Source Performance Standard (NSPS)) are not included in this permit. HWF mix, blend, and storage tanks 1 and 4 and HWF blending and storage tank 7 were constructed before July 23, 1984. HWF mix, blend, and storage tanks 18 through 23, HWF receiving and storage tank 29 and condensed liquid tank 01 each have a storage capacity greater than 75 m^3 (19,813 gallons) but less than 151 m^3 (39,888 gallons) and store volatile organic liquids with a maximum true vapor pressure less than 15.0 kPa. HWF blending and storage tank 6, tank 24HP, tank 24HD and product tanks 02 through 04 each have a storage capacity less than 75 m^3.

(d) The source is subject to the requirements of 326 IAC 14 and 40 CFR Part 61, Subpart J (National Emission Standards for Hazardous Air Pollutants (NESHAP) - Equipment Leaks from Fugitive Emission Sources of Benzene). Pursuant to the TSD for MPM 089-18513-00345, issued February 4, 2004, the source requested the flexibility to operate in benzene service and receive waste with a benzene content greater than 10% by weight. However, pursuant to 40 CFR 61.110(c)(2), the source's pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors surge control vessels, bottom receivers, and control devices do not process more than 1,102 tons of benzene per year. Therefore, pursuant to 40 CFR 61.110(c)(2), the source is exempt from the requirements of 40 CFR 61.112. 40 CFR 61.110(c)(1) specifies that if a source meets an exemption in 40 CFR 61.110(c)(2) or 40 CFR 61.110(c)(3), it must keep records in accordance with 40 CFR 61.246(i):

> Pursuant to 40 CFR 61.110(c)(1) and 40 CFR 61.246(i), the Permittee shall record, in a readily accessible log, the following information for every unit in benzene service:
>
> (1) An analysis demonstrating the design capacity of the process unit, and
>
> (2) An analysis demonstrating that equipment is not in VHAP service.

(e) The requirements of 326 IAC 14 and 40 CFR Part 61, Subpart Y (National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Emissions From Benzene Storage Vessels) are not included in the permit. The storage tanks located at this source store mixtures of various VOCs (which may include benzene) and not benzene exclusively.

(f) The requirements of 326 IAC 14 and 40 CFR Part 61, Subpart FF (National Emission Standards for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations) are not included in this permit. The source (which contains hazardous waste treatment and storage facilities pursuant to 40 CFR 61.340(b)) can not accept benzene-containing hazardous wastes from chemical manufacturing plants, coke by-product recovery plants, and/or petroleum refineries.

The source shall not accept benzene-containing hazardous waste (as defined by 40 CFR 61.341) from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery. Any change or modification which results in the source accepting a benzene-containing hazardous waste from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery must receive prior approval from IDEM, OAQ. The Permittee shall maintain records sufficient to demonstrate that no benzene-containing hazardous wastes are accepted from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery.

See the *Existing Approvals* section of this document for more information.

(g) The source is subject to the requirements of 326 IAC 20 and 40 CFR Part 63, Subpart DD (National Emission Standards for Hazardous Air Pollutants - Off-Site Waste and Recovery Operations) because the source is a major source of HAPs, receives off-site materials as defined in 40 CFR 63.680(b), and is regulated as a hazardous waste treatment, storage, and disposal facility (TSDF) under either 40 CFR Part 264 or Part 265. See the permit for the applicable requirements.

Pursuant to 40 CFR 63.680(c), the affected sources include the following:

(1) Offsite material management units, including tanks, containers, surface impoundments, oil-water separators, organic-water separators, or transfer systems. Therefore, the SDS shredder, the ATDU, and the tanks 01 through 04 at this source are considered offsite material management units.

(2) Process vents, including the vents for the distillation process, fractionation process, thin-film evaporation process, solvent extraction process, and steam stripping process. Therefore, the proposed distillation unit at this source is considered a process vent.

(3) Equipment leaks, including the equipment component which meets the criteria in 40 CFR 63.680(c)(3).

(h) This source may be subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring. In order for this rule to apply, a specific emissions unit must meet three criteria for a given pollutant: 1) the unit is subject to an emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and 3) the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the amount required for a source to be classified as a major source. Several units at this source use a VOC control device; however, due to the lack of reliable emission calculations, the OAQ is unable to determine if any units satisfy the first and third criteria. 40 CFR Part 64 will apply to if testing indicates that all three criteria have been satisfied. See the *State Rule Applicability - 326 IAC 2-3* section of this document for more information. Note that the Part 70 permit application was originally submitted prior to April 20, 1998; therefore, pursuant to 40 CFR 64.5, the source (and any subject facilities contained therein) is not subject to the rule until such time that the Part 70 permit must be renewed.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is located in Lake County which is designated as attainment for PM10, NO2, and CO. This source does not belong to one of the 28 PSD source categories with a PSD major threshold of 100 tons per year. Since the potential to emit all regulated pollutants is less than 250 tons per year, this source is a minor source with respect to 326 IAC 2-2 (Prevention of Significant Deterioration).

326 IAC 2-3 (Nonattainment NSR – Emission Offset)

This source is not subject to the requirements of 326 IAC 2-3 with respect to PM10, NO2, and CO because it is located in Lake County which is designated as an attainment area for those pollutants. The source is classified as a major source under 326 IAC 2-3 because it is located in Lake County (a severe non-attainment area for the 1-hr ozone standard) and has a potential to emit VOC greater than 25 tons per year.

On April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties, and one partial county, as nonattainment for the 8-hour ozone standard. The designations became effective on June 15, 2004. On December 12, 2004, 326 IAC 1-4-1 was revised to include the respective designations and incorporate them into 326 IAC 2-3. Lake County has been designated as nonattainment for the 8-hour ozone standard. Since no modifications (with the potential-to-emit VOC or NOx) have been completed since the effective date of the 8-hr ozone standard, this source is not subject to any related requirements at this time. However, the source is classified as a minor source for the 8-hr ozone standard under 326 IAC 2-3 because it has the potential-to-emit less than 100 tons per year of VOC and NOx, each.

On January 5, 2005, the EPA promulgated nonattainment designations for the PM2.5 NAAQS. These designations become effective on April 5, 2005. See 70 FR 944. On April 5, 2005, Steve Page, Director of the OAQPS, authored a memo titled “Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas” directing states to assume that a major stationary source’s PM10 emissions represent PM2.5 emissions until EPA promulgates the PM 2.5 major NSR regulations. As a result, IDEM, OAQ uses the PM10 nonattainment major NSR program (326 IAC 2-3) as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. PCI is located in Lake County which has been designated as nonattainment for PM 2.5 pursuant to 70 FR 943, dated January 5, 2005. Since no modifications (with the potential-to-emit particulate) have been completed since the effective date of the PM2.5 designations, this source is not subject to any related requirements at this time. However, assuming that PM10 emissions represent PM2.5 emissions, the source is classified as a minor source for the PM2.5 standard under 326 IAC 2-3 because it has the potential-to-emit less than 100 tons of PM10 per year.

Based on a review of the permit application, IDEM, OAQ has concluded that the VOC emissions from the Lab Pack/Depack Booth (LP B1 of Unit 4) and HHHW shredder (Unit 7) may be subject to the requirements of 326 IAC 2-3 (Emission Offset), 326 IAC 8-1-6 (BACT), and 326 IAC 8-7 but have not been reviewed pursuant to the rules because the appropriate approval was not received. Specifically, IDEM, OAQ has been unable to validate the source's calculations for emissions from the Lab Pack/Depack Booth (LP B1 of Unit 4) or the HHHW shredder (Unit 7).

This matter is currently being investigated by IDEM, OAQ and EPA Region 5. As a result, this permit requires testing to quantify VOC emissions from the Lab Pack/Depack Booth (LP B1 of Unit 4) and HHHW shredder (Unit 7). This information will be used to determine the applicability of 326 IAC 2-3 and 326 IAC 8-1-6 and/or 326 IAC 8-7. This permit does not require testing of emissions from HWF Storage (Unit 1), HWF Shipping (Unit 2), SDS Shredder, Anaerobic Desorption System, Distillation Unit, condensed liquid tanks or product tanks because the respective emissions estimates provided by the source are believed to be accurate. Once this matter is resolved, the OAQ will promptly reopen this permit using the provisions of 326 IAC 2-7-9 (Permit Reopening) to include: detailed requirements necessary to address the aforementioned rules, and a schedule for achieving compliance with any requirements.

Because it is anticipated that 326 IAC 2-3, 326 IAC 8-1-6, and/or 326 IAC 8-7 will be determined to be applicable after the investigation by IDEM, OAQ and the EPA, or that limits will be necessary to render the rules not applicable, monitoring of the carbon adsorbers is required by this permit. Monitoring shall be conducted in accordance with Section D and Section C - Compliance Monitoring.

On December 2, 2003, the source was issued MSM 089-15970-00345 for the construction and operation of the SDS Shredder, Anaerobic Thermal Desorption System, Distillation Unit, product

tanks 02 through 04, condensed liquid tank 01 and an insignificant oil heater. See the *Existing Approvals* section of this document for more information.

Pursuant to MSM 089-15970-00345, issued December 2, 2003, and MPM 089-18513-00345, issued February 2, 2004, and as revised by this Part 70 permit, the VOC emissions from the SDS shredder, Anaerobic Thermal Desorption System and Distillation Unit shall not exceed the emission limits listed in the table below:

Unit ID	Stack(s) ID	VOC Emission Limit (lb/hr)
SDS Shredder	SDS 01	0.028
Anaerobic Thermal Desorption System	SDS 03, SDS 07 and SDS 08	0.169
Distillation Unit	SDS 05	0.014

Compliance with these limits is equivalent to less than or equal to VOC emissions of 0.92 tons per year. Combined with the unlimited VOC emissions from product tanks 02 through 04, condensed liquid tank 01 and the insignificant oil heater, the VOC emissions from the modification permitted via MSM 089-15970-00345, issued December 2, 2003, are less than 25 tons per year (the applicable Emission Offset de minimus threshold). Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable to the SDS Shredder, Anaerobic Thermal Desorption System, Distillation Unit, product tanks 02 through 04, condensed liquid tank 01 and insignificant oil heater.

326 IAC 2-4.1 (Hazardous Air Pollutants)

The SDS Shredder, Anaerobic Thermal Desorption System, Distillation Unit and hazardous household waste (HHHW) drum shredder were constructed after July 27, 1997. However, these facilities are subject to the requirements of 40 CFR Part 63, Subpart DD. All other facilities located at this source were constructed prior to July 27, 1997. Therefore, this source, and all facilities contained therein, is not subject to the requirements of 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2004 and every 3 years after. This source which is located in Lake County also has potential to emit greater than or equal to 25 tons of VOC; therefore, an emission statement covering the previous calendar year must be submitted by July 1 of any year that the source is not already required to submit a statement if the source emits VOC into the ambient air at levels equal to or greater than 25 tpy. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

326 IAC 6.8-1 (Particulate Matter Limitations for Lake County)

The requirements of 326 IAC 6.8-1 are not applicable to the source because the source does not have the potential to emit one hundred (100) tons or more per year of particulate matter and does not have actual emissions of ten (10) tons or more of particulate matter per year.

326 IAC 6.8-2 (Lake County: PM10 Emission Requirements)

The requirements of 326 IAC 6.8-2 are not applicable to this source because the source is not specifically listed in 326 IAC 6.8-2-3 through 6.8-2-38.

326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter)

The requirements of 326 IAC 6.8-10 are not applicable to the source because the source does not have the potential to emit five (5) tons or more of fugitive particulate matter per year.

326 IAC 6.8-11 (Lake County: Particulate Matter Contingency Measures)

This source is not subject to the requirements of 326 IAC 6.8-11 because it is not subject to 326 IAC 6.8-2 and has the potential to emit PM10 less than ten (10) tons per year.

326 IAC 6-4 (Fugitive Dust Emissions)

The source is subject to 326 IAC 6-4 (Fugitive Dust Emissions) because the source maintains paved and unpaved roads and parking lots with public access. 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is not located in a county listed in 326 IAC 6-5-1(a) and has not added a facility with the potential to emit fugitive particulate matter greater than 25 tons per year, which requires a permit as set forth in 326 IAC 2, after December 13, 1985. Therefore, pursuant to 326 IAC 6-5-1, this source is not subject to the requirements of 326 IAC 6-5.

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the shaker and conveyor system section of the Anaerobic Thermal Desorption System (exhausting to stack SDS 04) shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4 tons per hour.

The pounds per hour limitation were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour.

All other facilities have the potential to emit particulate matter less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), those facilities are not subject to the requirements of 326 IAC 6-3-2.

326 IAC 7-1.1(Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, none of the facilities located at this source are subject to the requirements of 326 IAC 7-1.1 because they each have the potential to emit less than 25 tons of SO2 per year.

326 IAC 8-1-6 (Volatile Organic Compounds - BACT)

The SDS Shredder, Anaerobic Thermal Desorption System, Distillation Unit, condensed liquid tanks and product tanks were all constructed after January 1, 1980. However, the potential VOC emissions from each facility are less than 25 tons per year. Therefore, the SDS Shredder,

Anaerobic Thermal Desorption System, Distillation Unit, condensed liquid tanks and product tanks are not subject to the requirements of 326 IAC 8-1-6.

See the *State Rule Applicability - 326 IAC 2-3* section of this document for more information concerning the applicability of 326 IAC 8-1-6 with respect to the other significant emission units.

326 IAC 8-7 (Specific VOC reduction requirements for Lake, Porter, Clark, and Floyd Counties)

See the *State Rule Applicability - 326 IAC 2-3* section of this document for more information concerning the applicability of 326 IAC 8-7.

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

Pursuant to 326 IAC 8-9-1, stationary vessels with a capacity less than thirty-nine thousand (39,000) gallons, located at a source in Lake County, are subject to the reporting and record keeping provisions of sections 6(a) and 6(b) of this rule and are exempt from all other provisions of this rule. HWF mix blend and storage tanks 1, 4, 18, 19, 20, 21, 22, and 23, HWF blending and storage tanks 6 and 7, tank 24HP, tank 25HP, HWF receiving and storage tank 29, product tanks 02 through 04 and condensed liquid tank 01 are subject to the reporting and record keeping provisions of this rule. The reporting and record keeping requirements for HWF mix blend and storage tanks 1, 4, 18, 19, 20, 21, 22, and 23, HWF blending and storage tanks 6 and 7, tank 24HP, tank 25HP, HWF receiving and storage tank 29, product tanks 02 through 04 and condensed liquid tank 01 are as follows:

(a) The Permittee shall maintain records of the following for the life of the vessel:

(1) The vessel identification number;

(2) The vessel dimensions; and

(3) The vessel capacity.

(4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4(a) and 4(b), if applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4(b), if applicable, with a certification that the emission control equipment meets the applicable standards.

(b) A report containing the information described in (a) shall be submitted to IDEM, OAQ.

326 IAC 12 (New Source Performance Standards)

Pursuant to 326 IAC 12 and 326 IAC 1-1-3, storage tanks which store organic liquids must be reviewed pursuant to the July 1, 2000 version of 40 CFR Part 60, Subpart Kb.

HWF mix, blend and storage tanks 1 and 4, and HWF blending and mixing tank 7 are not subject to 326 IAC 12 because each was constructed prior to July 23, 1984.

HWF blending and mixing tank 6, tank 24HP and tank 25HD are not subject to 326 IAC 12 because each tank has a capacity less than 40 m^3 (10,566 gallons).

HWF mix blend and storage tanks 18, 19, 20, 21, 22, and 23, HWF receiving and storage tank 29 and condensed liquid tank 01 are subject to the requirements of 326 IAC 12 because each tank has a capacity greater than or equal to 75 m^3 but less than 151 m^3, stores volatile organic liquids with a maximum true vapor pressure less than 15.0 kPa and was constructed after July 23, 1984.

Product tanks 02 through 04 are subject to the requirements of 326 IAC 12 because each tank has a capacity greater than 40 m^3 but less than 75 m^3 and were constructed after July 23, 1984.

Pursuant to 326 IAC 12 and 326 IAC 1-1-3, the Permittee shall maintain the following for HWF mix blend and storage tanks 18, 19, 20, 21, 22, and 23, HWF receiving and storage tank 29, product tanks 02 through 04 and condensed liquid tank 01:

(a) Records showing the dimensions of each tank, and

(b) Records of an analysis showing the capacity of each tank.

These records shall be maintained for the life of the source. This requirement will remain in effect until 326 IAC 12 and 326 IAC 1-1-3 are revised to incorporate the October 15, 2003, or later, version of 40 CFR Part 60, Subpart Kb.

Compliance with the requirements of 326 IAC 8-9 shall satisfy the requirements of 326 IAC 12 with respect to these requirements.

State Rule Applicability – Insignificant Activities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Insignificant facilities LP B4 of Unit 4, Lab Pack Booth 2 and Booth 3 each have a process weight rate less than 100 pounds per hour. Therefore, pursuant to 326 IAC 6-3-2(e), the particulate emissions from LP B4 of Unit 4, Lab Pack Booth 2 and Booth 3 shall not exceed 0.551 pounds per hour, each. Compliance with 326 IAC 6-3-2(e) is expected as these facilities use particulate control devices.

The insignificant brazing equipment, cutting torches, soldering equipment and welding equipment each have the potential to emit particulate less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), these insignificant activities are not subject to the requirements of 326 IAC 6-3-2.

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

The insignificant degreasing operations are subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations) because it was constructed after January 1, 1980 and it performs organic solvent degreasing operations.

Pursuant to 326 IAC 8-3-2, the Permittee shall comply with the following requirements for the insignificant cold cleaner degreasing operations:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The insignificant degreasing operations were constructed before July 1, 1990 and are located at a source in Lake County. Pursuant to 326 IAC 8-3-1(b)(2), the insignificant degreasing operations are subject to the requirements of 326 IAC 8-3-5. As a result, the Permittee shall comply with the following requirements:

(a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(1) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F));

(2) The solvent is agitated; or

(3) The solvent is heated.

(b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

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

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

(3) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(f) Close the cover whenever articles are not being handled in the degreaser.

(g) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(h) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-3-8 (Material Requirements for Cold Cleaning Degreasers)

The insignificant degreasing operations are subject to the requirements of 326 IAC 8-3-8 because they are located in Lake County and perform cold cleaning degreasing. As a result, the Permittee must comply with the following requirements:

(a) Pursuant to 326 IAC 8-3-8(c)(2)(B), the Permittee shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Pursuant to 326 IAC 8-3-8(d)(2), the Permittee shall maintain each of the following records for each purchase of solvents for use in the insignificant Heritage cold cleaning

degreaser. These records shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

(1) The name and address of the solvent supplier.

(2) The date of purchase.

(3) The type of solvent.

(4) The volume of each unit of solvent.

(5) The total volume of the solvent.

(6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Testing Requirements

Within 180 days after issuance of this Part 70 permit, in order to determine the applicability of 326 IAC 2-3, 326 IAC 8-1-6, and 326 IAC 8-7, the Permittee shall perform VOC testing on the Lab Pack/Depack Booth (LP B1 of Unit 4) and HHHW shredder (Unit 7). These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be performed for VOC capture and destruction efficiency and shall be conducted in accordance with Section C - Performance Testing.

The Permittee shall perform VOC testing on the SDS Shredder, Anaerobic Thermal Desorption System and Distillation Unit no later than May 30, 2009. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less 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 requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions 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 approporiate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The Permittee shall conduct inspections, at least once per day, of each carbon adsorber/canister control system that is in use when the respective facilities are in operation. Inspections shall be made at both the inlet and outlet of the control system. The inspections shall be for the detection of VOC with a portable analyzer. If the inspections indicate that the outlet concentration of VOC is greater than or equal to two percent (2%) of the inlet concentration of VOC, then the Permittee shall take reasonable

response steps in accordance with Section C - Response to Excursions or Exceedances. If this value is below the detection threshold of the portable analyzer, then the Permittee shall take such response steps upon the detection of VOC at the outlet. The detection of VOC at the outlet in exceedance of this threshold is not a deviation from this permit. However, failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit. The instrument used for determining the presence of VOC at the inlet and outlet of the carbon adsorber systems shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once per operating day.

(b) In the event that malfunction in a carbon adsorbers/canister system has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(c) The presence of a flare pilot flame (for the flare controlling emissions from the VRU) shall be continuously monitored using a thermocouple, or any other equivalent device, to detect the presence of a flame. The Compliance Response Plan for this unit shall contain troubleshooting contingency and corrective actions for when the presence of a flame is not detected when the VRU is in operation. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a violation of this permit. Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

(d) Once per day visible emission notations of the stack exhaust from the shaker and conveyor system section of the Anaerobic Thermal Desorption System (exhausting to stack SDS 04) shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Permittee shall perform troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(e) The Permittee shall monitor the total static pressure drop across the baghouse used in conjunction with the shaker and conveyor system section of the Anaerobic Thermal Desorption System, at least once per day when the shaker and/or conveyor system is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

(f) An inspection shall be performed each calendar quarter of all bags controlling the shaker and conveyor system section of the Anaerobic Thermal Desorption System. Inspections shall not be performed during consecutive months. All defective bags shall be replaced.

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

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

These monitoring conditions are necessary because the carbon adsorption systems, flare and baghouse must operate properly to ensure compliance with 326 IAC 6-3-2, 326 IAC 2-7 (Part 70), 40 CFR Part 63, Subpart DD and render the requirements of 326 IAC 2-3 and 326 IAC 8-1-6 not applicable.

Conclusion

The operation of this stationary waste management and fuel processing source shall be subject to the conditions of this Part 70 permit T089-7738-00345.

Appendix A: Emissions Calculations
VOC and HAP
From HWF Tank Storage (Unit 1)

Company Name: Pollution Control Industries, Inc.
Address City IN Zip: 4343 Kennedy Avenue, East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

				Unscaled			Scaled (up to 52 wk/yr)		
Tank #	Capacity (gal)	Actual Thru (gpy)	Max Thru (gpy)	Uncontrolled VOC Emissions, lb/yr (TANKS 4.0)	Uncontrolled VOC Emissions, ton/yr	Controlled VOC Emissions, ton/yr	Uncontrolled VOC Emissions, lb/yr (TANKS 4.0)	Uncontrolled VOC/HAP Emissions, ton/yr	Controlled VOC/HAP Emissions, ton/yr
29[a]	20,057	501,425	1,002,850	1,933	0.97	0.010	2,010	1.01	0.010
1	12,690		1,625,000	1,432	0.72	0.007	1,432	0.72	0.007
4	12,690		1,625,000	1,432	0.72	0.007	1,432	0.72	0.007
18	20,353		1,625,000	2,027	1.01	0.010	2,027	1.01	0.010
19	20,353		1,625,000	2,027	1.01	0.010	2,027	1.01	0.010
20	20,353		1,625,000	2,027	1.01	0.010	2,027	1.01	0.010
21	20,353		1,625,000	2,027	1.01	0.010	2,027	1.01	0.010
22	20,353		1,625,000	2,027	1.01	0.010	2,027	1.01	0.010
23	20,353		1,625,000	2,027	1.01	0.010	2,027	1.01	0.010
6	4,386		228,072	424	0.21	0.002	424	0.21	0.002
7	2,900		150,800	275	0.14	0.001	275	0.14	0.001
TOTAL ALL TANKS				17,658	8.83	0.088	17,735	**8.87**	**0.089**

[a]source assumed one turnover per week, 50 weeks per year. Emissions from this tank are scaled up to 52 weeks per year.

Appendix A: Emissions Calculations
VOC and HAP
From HWF Shipping and Receiving (Unit 2)

Company Name: Pollution Control Industries, Inc.
Address City IN Zip: 4343 Kennedy Avenue, East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Submerged filling of rail cars.
VOC emissions are estimated using following equation, from Section 5.2 of AP-42:

$L_L = 12.46 * (S*P*M)/T$

	Used these values:	
LL = Loading loss per 1,000 gal liquid loaded		
S = saturation factor (from Table 5.2-1 of AP-42)	S	0.6
P = true vapor pressure of liquid load (psia)	P	0.97
M = molecular weight of vapors (lb/lb-mole)	M	75
T = temperature of bulk liquid loaded (deg. R)	T	530

L_L =	1.03	lb VOC/1,000 gal
Max throughput =	35,040,000	gal/yr[a]

Potential VOC/HAP = 17.98 TPY

[a] Based on a capacity of 4,000 gallons per hour, scaled up to 8,760 hours per year

Appendix A: Emissions Calculations
VOC and HAP
From Lab Pack/DePack Operation (Unit 4)

Company Name: Pollution Control Industries, Inc.
Address City IN Zip: 4343 Kennedy Avenue, East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Emissions from organic liquid depacking (LP B1 of Unit 4)

Organic liquids are depacked in Booth 1 (LP B1).

Assumptions[a]:
20 gal organic liquids/drum
50 drums depacked/day max
7.5 lb/gal average density of depacked liquids

Uncontrolled emissions were expected to be low (materials are not agitated, heated, or exposed for long periods of time).
Estimate of emissions as % of quantity depacked: 0.10%

20 gal/drum * 50 drums/day * 7.5 lb/gal * 0.1% = 7.5 lb VOC/day = **1.37 TPY VOC/HAP uncontrolled**

Estimated control efficiency of carbon adsorber packs: 99% = **0.014 TPY VOC/HAP controlled**

[a] These figures are estimates. LP B1 can also vent gaseous emissions from cylinders. However, the depacking of organic liquids is a worst case emissions scenario and therefore presented here.

Emissions from the packing of dry chemicals (LP B4 of Unit 4) - insignificant activity

Baghouse information:

Amount of particulate captured by baghouse	275 lbs
Operating schedule of baghouse:	2,080 hrs/yr
Estimated capture efficiency of baghouse:	99.90%

(8 hrs/day, 5 days/week, 52 weeks/yr)

Calculations:
Amount of particulate captured by baghouse per 8,760 hrs:
275 lbs * (8,760 hrs/yr)/(2,080 hrs/yr) * 1 ton/2,000 lbs = 0.58 tons PM/yr

Estimated uncontrolled particulate emissions per 8,760 hours:
0.58 tons PM/yr * 1/0.999 = **0.58 tons PM/yr uncontrolled**

Appendix A: Emissions Calculations
VOC and HAP
From Hazardous Household Waste (HHHW) Shredder (Unit 7)

Company Name: Pollution Control Industries, Inc.
Address City IN Zip: 4343 Kennedy Avenue, East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

The HHHW shredder (Unit 7) is designed to shred one drum every six minutes, or roughly one-quarter of the capacity of the former shredding tower. The source therefore estimated the potential stack emissions from the HHHW shredder to be one-quarter of the tower stack emissions.

The following calculations are based on previous stack test results and the estimation that shredder emissions equal 1/4 of the former shredding tower emissions.

Tower Stack:			
	62051 ppm inlet concentration	0.231 lb VOC/hr	1.01 stack TPY VOC
Estimated HHHW shredder emissions:			
	0.231 lb VOC/hr * 25% =	0.058 lb VOC/hr	**0.25 tpy (stack VOC/HAP)**

The contents of one 55-gallon drum per batch are dropped into the nitrogen-blanketed shredder. A volume of air approximately equal the the size of the drum is displaced, which contains fugitive VOC. Charges can be made as frequently as once every six minutes.
The source assumes that VOC emissions from batch discharge of shredded material are negligible.
Estimated VOC concentration of displaced air: 500 ppm (as hexane)

Amount of air displaced per charge:

55 gal/drum * 1 ft^3/7.48 gal = 7.4 ft^3/charge

Amount of VOC per charge:

7.4 ft^3/charge * 500 ft^3 VOC/1,000,000 ft^3 air * 0.227 lb hexane/ft^3 VOC = 0.001 lb VOC/charge

Amount of VOC per year:

0.001 lb VOC/charge * 1 charge/6 min * 60 min/hr * 8,760 hr/yr * 1 ton/2,000 lb

= **0.04 tpy (fugitive VOC/HAP)**

Appendix A: Emissions Calculations
Fugitive PM
From Paved/Unpaved Roads and Storage Piles

Company Name: Pollution Control Industries, Inc.
Address City IN Zip: 4343 Kennedy Avenue, East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Truck Dumping

E = k(0.0032) * (U/5)^1.3 / (M/2)^1.4

E =	Emission Factor (lbs/ton)	
k =	0.35	particle size multilplier for PM-10
	0.74	particle size multilplier for PM
U =	10.3	mean wind speed (mph)
M =	5	material moisture content (fraction)

PM Emission Factor:
E = 0.00168 lb/ton
PM-10 Emission Factor:
E = (0.35)(0.0032) * (12.7/5)^1.3 / (10%/2)^1.4
E = 0.000795 lb/ton
Annual potential amount of dry material delivered by truck = 1980 tpy
Potential PM Emissions (tons/year) = Emission factor (lb/ton) * Gypsum delivered (tpy) / 2000 (lbs/ton)
Potential PM Emissions (tons/year) = **0.0016631 tpy**
Potential PM-10 Emissions (tons/year) Emission factor (lb/ton) * Gypsum delivered (tpy) / 2000 (lbs/ton)
Potential PM-10 Emissions (tons/year) **0.0007866 tpy**

Paved Roads

Maximum Vehicular Speed: 5 mph
Average Distance of Haul: 0.15 miles

Vehicle Type	No. of One Way Trips per Hour	Weight
Tanker	0.29	37.5
Vans	0.25	35
Roll Off Boxes	0.08	35
Dump Truck	0.04	37.5
total	0.66	

Weighted Average Gross Weight: 36.25 tons
Calculations:

E = k(sL/2)^0.65 * (W/3)^1.5

E =	Emission factor (lbs/vehicle miles traveled(VMT))	
k =	0.016	particle size multiplier for PM-10
	0.082	particle size multiplier for PM
sL	3	road surface silt content (g/m^2)
W	36.25	weighted average vehicle weight (tons) (calculate from table above)

source: AP-42, chapter 13.2.1, p. 13.2.1-6.
VMT= 867.24 (miles/yr)

PM
E = 4.482841 lbs/VMT
Potential PM Emissions (ton/yr) = Emission factor (lbs/VMT) * VMT / 2000 (lbs/ton)
Potential PM Emissions (ton/yr) = **1.94 tpy**

PM-10
E = 0.874701 lbs/VMT
Potential PM-10 Emissions (ton/yr) = Emission factor (lbs/VMT) * VMT / 2000 (lbs/ton)
Potential PM-10 Emissions (ton/yr) = **0.38 tpy**

Appendix A: Emission Calculations
VOC and HAP
From the SDS Shredder (SDS)

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Process Description:

Max. Throughput Rate:	4.0	tons/hr	
VOC Emission Factor:	0.15	lbs/ton	(This is provided by the source, based on the stack test results from a similar unit)

Control Equipment: Carbon Adsorption System for VOC/HAP Control
Control Efficiency: 99.0%

Potential to Emit VOC/HAP before Control:

Assume all the VOC emissions are equal to HAP emissions because the HAP contents in the received waste very greatly.

PTE of VOC/HAP before Control = 4 tons/hr x 0.15 lbs/ton x 8760 hr/yr x 1 ton/2000 lbs = **2.63 tons/yr**

Potential to Emit VOC/HAP after Control:

PTE of VOC/HAP after Control = 4 tons/hr x 0.15 lbs/ton x 8760 hr/yr x 1 ton/2000 lbs x (1- 99%) = **0.03 tons/yr**

Appendix A: Emission Calculations
VOC and HAP Emissions
From the Anaerobic Thermal Desorption System (ATDS)

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Process Description:

Max. Throughput Rate:	4.0	tons/hr	
Max. Flow Rate:	75	acfm	
Max. Inlet VOC Concentration:	10,000	ppm	(This is provided by the source, based on the trial results in April 2003)
Control Equipment:	Carbon Adsorption System for VOC/HAP Control		
Control Efficiency:	99.0%		

Potential to Emit VOC/HAP before Control:

Since the VOC/HAP concentration in the received waste is expected to be highly variable, assume all the VOC emissions are equal to HAP emissions. In order to estimate PTE of VOC, assume all VOC are ethylene, which has a vapor density of 0.075 lbs/ft^3.

PTE before Control (lbs/hr) = 75 ft^3/min x 60 min/hr x 10,000 ppm x 1/1000,000 ppm x 0.075 lbs/ft^3 = **3.38 lbs/hr**

PTE before Control (tons/yr) = 3.38 lbs/hr x 8760 hr/yr x 1 ton/2000 lbs = **14.8 tons/yr**

Potential to Emit VOC/HAP after Control:

PTE after Control (lbs/hr) = 75 ft^3/min x 60 min/hr x 10,000 ppm x 1/1000,000 ppm x 0.075 lbs/ft^3 x (1-99%) = **0.03 lbs/hr**

PTE after Control (tons/yr) = 14.8 tons/yr x (1- 99%) = **0.15 tons/yr**

Appendix A: Emission Calculations
PM/PM10 Emissions
From the Anaerobic Thermal Desorption system (ATDS)

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Process Description:

Control Equipment:	Scrubber for Particulate Control	
Grain Loading:	0.03	grains/dscf
Air Flow Rate:	500	dscfm
Control Efficiency:	90.0%	

Potential to Emit After Control:

Assume all the PM emissions are equal to PM10 emissions.

Hourly PM/PM10 Emissions	= 0.03 gr/dscf x 500 dscf/min x 60 min/hr x 1/7000 lb/gr =	**0.13 lbs/hr**
Annual PM/PM10 emissions	= 0.13 lbs/hr x 8760 hr/yr x 1/2000 (ton/lb) =	**0.563 tons/yr**

Potential to Emit Before Control:

PTE of PM/PM10 Before Control	= 0.563 tons/yr / (1-90%) =	**5.63 tons/yr**

Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From the NG Combustion in Anaerobic Thermal Desorption Unit (ATDU)

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
10.0	87.6

	Pollutant					
	PM*	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	**0.33**	**0.33**	**0.03**	**4.38**	**0.24**	**3.68**

*PM and PM10 emission factors are condensable and filterable PM10 combined.
**Emission Factors for NO_x: Uncontrolled = 100.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations
VOC and HAP Emissions
From the Distillation Unit

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Process Description:

Max. Throughput Rate:	1.0	ton/hr	
VOC Emission Factor:	0.52	lbs/ton	(This is provided by the manufacturer)
Control Equipment:	Carbon Adsorption System for VOC/HAP Control		
Control Efficiency:	99.0%		

Potential to Emit VOC/HAP before Control:

Assume all the VOC emissions are equal to HAP emissions because the HAP contents in the received waste very greatly.

PTE of VOC/HAP before Control = 1 tons/hr x 0.52 lbs/ton x 8760 hr/yr x 1 ton/2000 lbs = **2.28 tons/yr**

Potential to Emit VOC/HAP after Control:

PTE of VOC/HAP after Control = 1 tons/hr x 0.52 lbs/ton x 8760 hr/yr x 1 ton/2000 lbs x (1- 99%) = **0.02 tons/yr**

Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From the 2.5 MMBtu/hr Hot Oil Heater

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
Permit #: T089-7738-00345
Reviewer: ERG/BS
Date: 10-Sep-05

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.5	21.9

	Pollutant					
	PM*	PM10*	SO_2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	**0.08**	**0.08**	**0.01**	**1.10**	**0.06**	**0.92**

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton