NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a Part 70 Operating Permit for Reagent Chemical & Research, Inc. in Starke County

Significant Source Modification No.: 149-43822-00028
Significant Permit Modification No.: 149-43947-00028

The Indiana Department of Environmental Management (IDEM) has received an application from Reagent Chemical & Research, Inc., located at 1705 West Pacific Ave., Knox, Indiana 46534, for a significant modification of its Part 70 Operating Permit issued on February 3, 2020. If approved by IDEM’s Office of Air Quality (OAQ), this proposed modification would allow Reagent Chemical & Research, Inc. to make certain changes at its existing source. Reagent Chemical & Research, Inc. has applied to remove their 326 IAC 8-1-6 avoidance limits and become subject to the 326 IAC 8-1-6 Best Available Control Technology (BACT) requirements for the manual gluing operation PO12 and the manual rubber lining operation PO16, and voluntarily add an HCl scrubber to the manual gluing operation PO12.

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

A copy of the permit application and IDEM’s preliminary findings have been sent to:

Starke County Public Library System - Schricker Main Library
152 W Culver Rd
Knox, IN 46534

and

IDEM Northern Regional Office
300 North Dr. Martin Luther King Jr. Boulevard, Suite 450
South Bend, IN 46601-1295

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

A copy of the application and preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/public-notices/) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when
IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

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

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SSM 149-43822-00028 and SPM 149-43947-00028 in all correspondence.

Comments should be sent to:

Natalie Moore
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Natalie Moore or (317) 233-8279
Or dial directly: (317) 233-8279
Fax: (317) 232-6749 attn: Natalie Moore
E-mail: nmoore@idem.IN.gov

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

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens’ Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

What will happen after IDEM makes a decision?

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

[Signature]

Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality
Mr. John Thomas  
Reagent Chemical & Research, Inc.  
1705 W Pacific Ave  
Knox, IN 46534

Re: 149-43947-00028  
Significant Permit Modification

Dear Mr. Thomas:

Reagent Chemical & Research, Inc. was issued Part 70 Operating Permit Renewal No. T149-41337-00028 on February 3, 2020 for a stationary railcar and truck repair and rubberlining facility located at 1705 W Pacific Ave., Knox, Indiana 46534. An application requesting changes to this permit was received on March 1, 2021. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachment(s). Since this attachment has been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of this attachment with this modification:

Attachment A: 40 CFR 63, Subpart MMMM, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

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

Previously issued approvals for this source are also available via IDEM’s Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.


A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the application and permit is also available via IDEM’s Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens’ Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
DRAFT

If you have any questions regarding this matter, please contact Natalie Moore, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-8279 or (800) 451-6027, and ask for Natalie Moore or (317) 233-8279.

Sincerely,

Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - Starke County
    Starke County Health Department
    U.S. EPA, Region 5
    Compliance and Enforcement Branch
    IDEM Northern Regional Office
Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Reagent Chemical & Research, Inc.
1705 West Pacific Ave.
Knox, Indiana 46534

(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.

<table>
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<tr>
<td>Master Agency Interest ID: 101199</td>
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<tr>
<td>Issued by: Original Signed By:</td>
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<tr>
<td>Madhurima D. Moulik, Ph.D., Section Chief</td>
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<tr>
<td>Permits Branch</td>
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<tr>
<td>Office of Air Quality</td>
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<tr>
<td>Issuance Date: February 3, 2020</td>
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<td>Expiration Date: February 3, 2025</td>
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Significant Permit Modification No. 149-43291-00028, issued on March 16, 2021.

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<tr>
<td>Madhurima D. Moulik, Ph.D., Section Chief</td>
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<tr>
<td>Permits Branch</td>
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<td>Office of Air Quality</td>
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<tr>
<td>Issuance Date:</td>
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<tr>
<td>Expiration Date: February 3, 2025</td>
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Attachment A - 40 CFR 63, Subpart MMMM
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(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary railcar and truck repair and rubberlining facility.

<table>
<thead>
<tr>
<th>Source Address:</th>
<th>1705 West Pacific Ave., Knox, Indiana 46534</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Source Phone Number:</td>
<td>574-772-7424</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>4789 (Transportation Services) and 7699 (Repair Services)</td>
</tr>
<tr>
<td>County Location:</td>
<td>Starke</td>
</tr>
<tr>
<td>Source Location Status:</td>
<td>Attainment for all criteria pollutants</td>
</tr>
<tr>
<td>Source Status:</td>
<td>Part 70 Operating Permit Program</td>
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</table>
<pre><code>                       | Minor Source, under PSD Rules |
                       | Major Source, Section 112 of the Clean Air Act |
                       | Not 1 of 28 Source Categories |
</code></pre>

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

   This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

   This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

(c) One (1) Abrasive Blasting Unit, identified as PO11, constructed in 2008, with a maximum of abrasive coal slag usage rate of 950 lb/hr, using dust collector CE011 as control, and exhausting to stack SO11;

(d) One (1) Abrasive Blasting Unit, identified as PO15, constructed in 2011, with a maximum abrasive coal slag usage rate of 728 lb/hr, using dust collector CE015 as control, and exhausting to stack SO15;

(e) One (1) HCl Holding Tank, identified as PO10, constructed in 2008, with a maximum capacity of 1,000 gallons of hydrogen chloride solution, using a water scrubber CE010 as control and exhausting to stack SO10; and

(f) One (1) Waterwash / HCl Holding Tank, identified as PO14, constructed in 2011, with a
maximum capacity of 6,500 gallons of hydrogen chloride solution, using a Water Scrubber CEO14 as control, and exhausting to stack SO14.

(g) One (1) Abrasive Blasting Unit, identified as PO18, approved in 2021 for construction, with a maximum blasting capacity of 3,514 pounds per hour of coal slag, using dust collector CE017 as control, and exhausting to stack SO17.

A.3 Specifically Regulated Insignificant Activities

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

(a) One (1) Natural Gas-Fired Boiler, identified as PO13, constructed in 2008, with a maximum capacity of 0.37 MMBtu/hr, and exhausting to stack SO13;

(b) One (1) natural gas-fired regenerative thermal oxidizer (RTO), identified as CE016, constructed in 2015, with a maximum heat input capacity of 3.0 MMBtu/hr and an operating set point between 1,400 °F and 1,700 °F, and exhausting to stack SO16;

(c) One (1) parts washer, identified as PO19, constructed in 2017, with a maximum solvent usage of 45 gallons per year.

(d) Paved and unpaved roads and parking lots with public access.

A.4 Other Insignificant Activities

This stationary source also includes the following insignificant activities which are not specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) One (1) Welding and Cutting Operation, identified as P017, constructed in 2011, approved in 2021 for modification, and consisting of:

(1) Three (3) MIG welders;

(2) Three (3) stick welders;

(3) Three (3) TIG welders;

(4) Three (3) plasma cutters;

(5) Three (3) oxyacetylene torches.

A.4 Part 70 Permit Applicability

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).
SECTION B  GENERAL CONDITIONS

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

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

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

(a) This permit, T149-41337-00028, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

1. it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

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

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

1. The appropriate identification of each term or condition of this permit that is the basis of the certification;

2. The compliance status;

3. Whether compliance was continuous or intermittent;

4. The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance
causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

1. An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
2. The permitted facility was at the time being properly operated;
3. During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
4. For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;
   Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
   Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
   Facsimile Number: 317-233-6865
   Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877
5. For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:
   Indiana Department of Environmental Management
   Compliance and Enforcement Branch, Office of Air Quality
   100 North Senate Avenue
   MC 61-53 IGCN 1003
   Indianapolis, Indiana 46204-2251
   within two (2) working days of the time when emission limitations were exceeded due to the emergency.

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

(A) A description of the emergency;
(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

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

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

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

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

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable
requirement until the permit is reissued. The permit shield shall continue in effect so long as
the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after
issuance of this permit to have been based on erroneous information supplied in the
permit application. Erroneous information means information that the Permittee knew to
be false, or in the exercise of reasonable care should have been known to be false, at the
time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including
the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to
or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section
408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section
114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2)
(Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading
based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until
after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM,
OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

(a) All terms and conditions of permits established prior to T149-41337-00028 and issued
pursuant to permitting programs approved into the state implementation plan have been
either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous
registrations and permits are superseded by this Part 70 operating permit.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a
timely and complete renewal application is submitted at least nine (9) months prior to the date of
expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).
B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(1) That this permit contains a material mistake.

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

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

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

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

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

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

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

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

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

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5]
A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee’s premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-8590 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

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

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

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

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

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

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

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

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

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

   (A) Asbestos removal or demolition start date;

   (B) Removal or demolition contractor; or

   (C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.
Testing Requirements [326 IAC 2-7-6(1)]

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

(a) For new units:

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

(b) For existing units:

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

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

C.11 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.12 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or
(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.14 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:
(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

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

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:
Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

   This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

   This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

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

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

**D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]**

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Permittee shall comply with the following limitations for the manual gluing operation PO12 and the manual rubber lining operation PO16:

(a) The VOC emissions from the manual gluing operation (PO12) and the manual rubber lining operation (PO16) shall each be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation and the manual rubber lining operation are in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices shall be adopted – including storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.

Compliance with the above shall satisfy the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) for the use of the manual gluing operation (PO12) and the manual rubber lining operation (PO16).

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

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

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

**D.1.3 Thermal Oxidizer Operation**

In order to ensure compliance with Condition D.1.1, the regenerative thermal oxidizer shall be in operation and control emissions from the manual gluing operation (PO12) and the manual rubber lining operation (PO16).
lining operation (PO16) at all times the manual gluing operation (PO12) and the manual rubber lining operation (PO16) are each in operation.

D.1.4 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition D.1.1, the Permittee shall conduct a performance test to verify the overall VOC control efficiency (including capture and destruction efficiency) of the regenerative thermal oxidizer, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.1.5 Thermal Oxidizer Temperature

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

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

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

(d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.6 Parametric Monitoring

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

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

(c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.5, the Permittee shall maintain continuous temperature records (on a 3-hour average basis) for the regenerative thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its daily record when a 3-hour average temperature record is not taken and the reason for the lack of a 3-hour average temperature record (e.g., the process did not operate that day).

(b) To document the compliance status with Condition D.1.6, the Permittee shall maintain daily records of the duct pressure or fan amperage and the duct pressure or fan amperage used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its daily record when a duct pressure or fan amperage record is not taken and the reason for the lack of duct pressure or fan amperage record (e.g., the process did not operate that day).

(c) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) Abrasive Blasting Unit, identified as PO11, constructed in 2008, with a maximum of abrasive coal slag usage rate of 950 lb/hr, using dust collector CE011 as control, and exhausting to stack SO11;

(d) One (1) Abrasive Blasting Unit, identified as PO15, constructed in 2011, with a maximum abrasive coal slag usage rate of 728 lb/hr, using dust collector CE015 as control, and exhausting to stack SO15;

(g) One (1) Abrasive Blasting Unit, identified as PO18, approved in 2021 for construction, with a maximum blasting capacity of 3,514 pounds per hour of coal slag, using dust collector CE017 as control, and exhausting to stack SO17.

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

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

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the abrasive blasting units (PO11, PO15, and PO18) shall not exceed the pound per hour limitations listed in the table below when operating at the specified process weight rate.

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>Process Weight Rate (tons/hr)</th>
<th>326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO11</td>
<td>0.475</td>
<td>2.49</td>
</tr>
<tr>
<td>PO15</td>
<td>0.364</td>
<td>2.08</td>
</tr>
<tr>
<td>PO18</td>
<td>1.757</td>
<td>5.98</td>
</tr>
</tbody>
</table>

The pound per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (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.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.2.3 Particulate Control

(a) In order to comply with Condition D.2.1, the dust collector CE011 shall be in operation and control particulate emissions from the abrasive blasting unit PO11 at all times the abrasive blasting unit PO11 is in operation.

(b) In order to comply with Condition D.2.1, the dust collector CE015 shall be in operation
and control particulate emissions from the abrasive blasting unit PO15 at all times the abrasive blasting unit PO15 is in operation.

(c) In order to comply with Condition D.2.1, the dust collector CE017 shall be in operation and control particulate emissions from the abrasive blasting unit PO18 at all times the abrasive blasting unit PO18 is in operation.

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

D.2.4 Visible Emissions Notations

(a) Visible emission notations of the dust collector CE011, CE015, and CE017 stack exhausts (SO11, SO15, and SO17) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.4, the Permittee shall maintain a daily record of visible emission notations of the dust collector CE011, CE015, and CE017 stack exhausts (SO11, SO15, and SO17). The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.
SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant activities:

(a) One (1) Natural Gas-Fired Boiler, identified as PO13, constructed in 2008, with a maximum capacity of 0.37 MMBtu/hr, and exhausting to stack SO13;

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

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

D.3.1 Particulate Emissions Limitations for Sources of Indirect Heat [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate matter (PM) from the natural gas fired boiler, identified as PO13, shall not exceed 0.6 pounds per MMBtu heat input.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.
SECTION D.4  EMISSIONS UNIT OPERATION CONDITIONS

Insignificant Activities:

(c) One (1) parts washer, identified as PO19, constructed in 2017, with a maximum solvent usage of 45 gallons per year.

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

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

D.4.1 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall:

(a) Ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

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

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

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

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

(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) Ensure the following additional control equipment and operating requirements are met:

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

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

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

(C) A refrigerated chiller.

(D) Carbon adsorption.

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

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
(3) If used, solvent spray:
   (A) must be a solid, fluid stream; and
   (B) shall be applied at a pressure that does not cause excessive splashing.

D.4.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial 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).

D.4.3 Preventive Maintenance Plan[326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility and its associated control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.4.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.2, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically 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 (or invoice/bill dates of contract servicer indicating service date).

   (3) The type of solvent purchased.

   (4) The total volume of the solvent purchased.

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

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.
SECTION E.1 NESHAP

Emissions Unit Description:

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

Insignificant activities:

(b) One (1) natural gas-fired regenerative thermal oxidizer (RTO), identified as CE016, constructed in 2015, with a maximum heat input capacity of 3.0 MMBtu/hr and an operating set point between 1,400 °F and 1,700 °F, and exhausting to stack S016;

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

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

E.1.1 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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


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

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
E.1.3 National Emission Standards for Hazardous Air Pollutants Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart MMMM] [326 IAC 20-80]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart MMMM (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-80, for the emission unit(s) listed above:

(1) 40 CFR 63.3880;
(2) 40 CFR 63.3881(a)(1 and 5), and (b);
(3) 40 CFR 63.3882(a), (b), and (c);
(4) 40 CFR 63.3883(c)(1);
(5) 40 CFR 63.3890(a)(4);
(6) 40 CFR 63.3891(c);
(7) 40 CFR 63.3892(b);
(8) 40 CFR 63.3893(b);
(9) 40 CFR 63.3900(a)(2), (b), and (c);
(10) 40 CFR 63.3901;
(11) 40 CFR 63.3910(a), (b), (c)(1 through 7), (c)(8)(iii), and (c)(9);
(12) 40 CFR 63.3920(a)(1), (a)(2), (a)(3)(i through v), (a)(4), (a)(7), (b), and (c);
(13) 40 CFR 63.3930(a), (b), (c)(1), (c)(4), (d), (e), (f), (g), (j), and (k);
(14) 40 CFR 63.3931;
(15) 40 CFR 63.3960(a), and (c);
(16) 40 CFR 63.3961(except i);
(17) 40 CFR 63.3963(a) through (f), and (j);
(18) 40 CFR 63.3964;
(19) 40 CFR 63.3965;
(20) 40 CFR 63.3966;
(21) 40 CFR 63.3967(a) and (f);
(22) 40 CFR 63.3968(a), (c)(1), (c)(3), and (g);
(23) 40 CFR 63.3980;
(24) 40 CFR 63.3981;
(25) Table 1 (item 1 and 6); and
(26) Table 2, Table 3, Table 4, and Appendix A.

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

E.1.4 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition E.1.2, the Permittee shall perform the testing required under 40 CFR 63, Subpart MMMM, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C - Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, Indiana 46534
Part 70 Permit No.: T149-41337-00028

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: ____________________________
PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, Indiana 46534
Part 70 Permit No.: T149-41337-00028

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

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

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:
If any of the following are not applicable, mark N/A

<table>
<thead>
<tr>
<th>Date/Time Emergency started:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time Emergency was corrected:</td>
</tr>
<tr>
<td>Was the facility being properly operated at the time of the emergency?</td>
</tr>
<tr>
<td>Type of Pollutants Emitted: TSP, PM-10, SO2, VOC, NOx, CO, Pb, other:</td>
</tr>
<tr>
<td>Estimated amount of pollutant(s) emitted during emergency:</td>
</tr>
<tr>
<td>Describe the steps taken to mitigate the problem:</td>
</tr>
<tr>
<td>Describe the corrective actions/response steps taken:</td>
</tr>
<tr>
<td>Describe the measures taken to minimize emissions:</td>
</tr>
<tr>
<td>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:</td>
</tr>
</tbody>
</table>

Form Completed by: ____________________________________________________________
Title / Position: ______________________________________________________________
Date: _______________________________________________________________________
Phone: ______________________________________________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, Indiana 46534
Part 70 Permit No.: T149-41337-00028

Months: ___________ to ___________ Year: ______________

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

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of Deviations:</th>
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<tbody>
<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<td>Permit Requirement (specify permit condition #)</td>
<td></td>
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<tr>
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<td>Duration of Deviation:</td>
</tr>
<tr>
<td>Number of Deviations:</td>
<td></td>
</tr>
<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
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<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
</tbody>
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<table>
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<td></td>
</tr>
<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
</tbody>
</table>

Form Completed by: _______________________________________________________
Title / Position: ___________________________________________________________
Date: ___________________________________________________________________
Phone: ___________________________________________________________________
Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

<table>
<thead>
<tr>
<th>Source Name:</th>
<th>Reagent Chemical &amp; Research, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Location:</td>
<td>1705 West Pacific Ave., Knox, Indiana 46534</td>
</tr>
<tr>
<td>County:</td>
<td>Starke</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>4789 (Transportation Services)</td>
</tr>
<tr>
<td></td>
<td>7699 (Repair Services)</td>
</tr>
<tr>
<td>Operation Permit No.:</td>
<td>T149-41337-00028</td>
</tr>
<tr>
<td>Operation Permit Issuance Date:</td>
<td>February 3, 2020</td>
</tr>
<tr>
<td>Significant Source Modification No.:</td>
<td>149-43822-00028</td>
</tr>
<tr>
<td>Significant Permit Modification No.:</td>
<td>149-43947-00028</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>Natalie Moore</td>
</tr>
</tbody>
</table>

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T149-41337-00028 on February 3, 2020. The source has since received the following approvals:

(a) Significant Source Modification No. 149-43174-00028, issued on February 3, 2021; and

(b) Significant Permit Modification No. 149-43291-00028, issued on March 16, 2021.

County Attainment Status

The source is located in Starke County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective January 16, 2018, for the 2015 8-hour ozone standard.</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Unclassifiable or attainment effective January 29, 2012, for the 2010 NO₂ standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
</tr>
</tbody>
</table>

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOₓ) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOₓ emissions are considered when evaluating the rule applicability relating to ozone. Starke County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
PM$_{2.5}$

Starke County has been classified as attainment for PM$_{2.5}$. Therefore, direct PM$_{2.5}$, SO$_2$, and NO$_x$ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants

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

Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Modification (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$^1$</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
</tr>
</tbody>
</table>
### Source-Wide Emissions Prior to Modification (ton/year)

<table>
<thead>
<tr>
<th></th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹,²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP³</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title V Major Source Thresholds</strong></td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td><strong>PSD Major Source Thresholds</strong></td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."

²PM₂.₅ listed is direct PM₂.₅.

³Single highest source-wide HAP is Toluene.

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs.

(c) These emissions are based on the TSD of Significant Permit Modification No. 149-43291-00028, issued on March 16, 2021.

### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Reagent Chemical & Research, Inc. on March 1, 2021, relating to the removal of the 326 IAC 8-1-6 avoidance limits and subsequent applicability of the 326 IAC 8-1-6 BACT requirements for the manual gluing operation PO12 and the manual rubber lining operation PO16, and the voluntary addition of an HCl scrubber to the manual gluing operation PO12.

The following is a list of the modified emission units and pollution control devices:

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

Note: The new HCl scrubber CE017 only controls emissions from pickup locations 3 and 4, due to those being the only locations on the line with any potential to emit HCl fumes.

(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

### Enforcement Issues

There are no pending enforcement actions related to this modification.
Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

**Permit Level Determination – Part 70 Modification to an Existing Source**

There are no new emission units or modifications to existing emission units (i.e., no physical change or change in the method of operation occurring at the source) as a result of this modification. See the "Description of Proposed Modification " section above for more detail.

(a) **Approval to Construct**  
Pursuant to 326 IAC 2-7-10.5(g)(2), a Significant Source Modification is required because this modification is subject to 326 IAC 8-1-6.

(b) **Approval to Operate**  
Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification makes a significant change to existing monitoring conditions.

**Permit Level Determination – PSD**

(a) There is no physical change or change in the method of operation occurring at the source as a result of this modification and there are no increases of regulated NSR pollutants.

**PTE of the Entire Source After Issuance of the Part 70 Modification**

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions After Issuance (ton/year)</th>
<th>PM $^1$</th>
<th>PM$_{10}$ $^1$</th>
<th>PM$_{2.5}$ $^{1,2}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP $^3$</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitives*</td>
<td>232.01</td>
<td>185.92</td>
<td>185.92</td>
<td>0.01</td>
<td>1.45</td>
<td>1.52</td>
<td>1.22</td>
<td>46.72</td>
<td>56.05</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

$^1$Under the Part 70 Permit program (40 CFR 70), PM$_{10}$ and PM$_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

$^2$PM$_{2.5}$ listed is direct PM$_{2.5}$.

$^3$Single highest source-wide HAP is Toluene.

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the emissions of each PSD regulated pollutant will continue to be less than the PSD major source thresholds.
(b) This existing area source of HAP will become a major source of HAP, as defined in 40 CFR 63.2, upon issuance of this modification because HAP emissions will be equal to or greater than ten (10) tons per year for any single HAP and/or equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

**Federal Rule Applicability Determination**

Federal rule applicability has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this proposed modification.

**National Emission Standards for Hazardous Air Pollutants (NESHAP):**

(a) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed modification.

**Compliance Assurance Monitoring (CAM):**

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td>is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and</td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td>uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.</td>
<td></td>
</tr>
</tbody>
</table>

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

The following table is used to identify the applicability of CAM to new and modified emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

<table>
<thead>
<tr>
<th>Emission Unit/Pollutant</th>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE (tons/year)</th>
<th>Controlled PTE (tons/year)</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Gluing Operation PO12 / VOC</td>
<td>RTO</td>
<td>326 IAC 8-1-6</td>
<td>&lt; 100</td>
<td>--</td>
<td>N ¹</td>
<td>--</td>
</tr>
<tr>
<td>Manual Gluing Operation PO12 / HCl</td>
<td>DS</td>
<td>None</td>
<td>--</td>
<td>--</td>
<td>N</td>
<td>--</td>
</tr>
<tr>
<td>Manual Rubber Lining Operation PO16 / VOC</td>
<td>RTO</td>
<td>326 IAC 8-1-6</td>
<td>&lt; 100</td>
<td>--</td>
<td>N ¹</td>
<td>--</td>
</tr>
</tbody>
</table>
Under the Part 70 Permit program (40 CFR 70), PM is not a regulated air pollutant.

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for regulated air pollutants (PM10, PM2.5, SO2, NOx, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

CAM does not apply for VOC because the uncontrolled PTE of VOC is less than the major source threshold.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, DS = Dry Scrubber, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Precipitator

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

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

**State Rule Applicability - Entire Source**

Due to this modification, state rule applicability has been reviewed as follows:

**326 IAC 2-2 (PSD)**
PSD applicability is discussed under the the Permit Level Determination - PSD Emissions Increase of this document.

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of the manual gluing operation PO12 and the manual rubber lining operation PO16 (constructed in 2008 and 2011, respectively) will emit greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 would apply to the manual gluing operation PO12 and the manual rubber lining operation PO16. However, pursuant to 326 IAC 2-4.1-1(b)(2), because the manual gluing operation PO12 and the manual rubber lining operation PO16 are specifically regulated under NESHAP 40 CFR 63, Subpart MMMM, which was issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA, the manual gluing operation PO12 and the manual rubber lining operation PO16 are exempt from the requirements of 326 IAC 2-4.1.

**326 IAC 2-7-6(5) (Annual Compliance Certification)**
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

**State Rule Applicability – Individual Facilities**

Due to this modification, state rule applicability has been reviewed as follows:

**326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)**
The manual gluing operation PO12 and the manual rubber lining operation PO16 are both subject to the requirements of 326 IAC 8-1-6, because they were each constructed after January 1, 1980, and their
unlimited VOC potential emissions are equal to or greater than twenty-five (25) tons per year, each, and the manual gluing operation PO12 and the manual rubber lining operation PO16 are not regulated by other rules in 326 IAC 8. Therefore, Best Available Control Technology (BACT) analyses were required for the manual gluing operation PO12 and the manual rubber lining operation PO16 (see Appendix B of this TSD).

According to the BACT analyses contained in Appendix B of this TSD, IDEM, OAQ has determined that the following requirements represent BACT for the manual gluing operation PO12 and the manual rubber lining operation PO16:

(a) The VOC emissions from the manual gluing operation (PO12) and the manual rubber lining operation (PO16) shall each be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation and the manual rubber lining operation are in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices shall be adopted – including storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.

Compliance with the above shall satisfy the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) for the use of the manual gluing operation (PO12) and the manual rubber lining operation (PO16).

326 IAC 8-2-2 (Automobile and Light Duty Truck Coating)

The requirements of 326 IAC 8-2-2 are not included for the manual gluing and manual rubber lining operations (PO12 and PO16) because this rule applies to automobile and light duty truck surface coating operations which include all passenger car or passenger car derivatives capable of seating twelve (12) or fewer passengers and any motor vehicle rated at three thousand eight hundred sixty-four (3,864) kilograms (eight thousand five hundred (8,500 pounds) gross weight or less that are designed primarily for the purpose of transportation or are derivatives of such vehicles. The manual gluing operation performs coating of railcars, and the manual rubber lining operation performs coating of semi tank trucks that are not considered light duty trucks, since they have a gross weight of greater than 8,500 pounds. Therefore, the requirements of 326 IAC 8-2-2 are not applicable.

326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)

The requirements of 326 IAC 8-2-9 are not included for the manual gluing and manual rubber lining operations (PO12 and PO16) because this rule applies to metal surface coating of large and small farm machinery, small household appliances, office equipment, commercial and industrial machinery, or any other industrial category which coats metal parts or products under the Standard Industrial Classification (SIC) Code of major groups #33, #34, #35, #36, #37, #38, and #39. The manual gluing operation applies coating to railcars and is listed under the SIC Code #47, and the manual rubber lining operation applies coating to tank trucks and is listed under the SIC Code #75. Therefore, the requirements of 326 IAC 8-2-9 are not applicable.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.
If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source’s failure to take the appropriate corrective actions within a specific time period.

(a) The Compliance Determination Requirements applicable to this modification are as follows:

(1) The manual gluing operation (PO12) and the manual rubber lining operation (PO16) have applicable compliance determination conditions as specified below:

(A) In order to ensure compliance with the permit, the regenerative thermal oxidizer shall be in operation and control emissions from the manual gluing operation (PO12) and the manual rubber lining operation (PO16) at all times the manual gluing operation (PO12) and the manual rubber lining operation (PO16) are each in operation.

Testing Requirements:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Device</th>
<th>Timeframe for Testing</th>
<th>Pollutant/ Parameter</th>
<th>Frequency of Testing</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Gluing Operation (PO12)</td>
<td>Regenerative Thermal Oxidizer CE016</td>
<td>5 years from May 3, 2018</td>
<td>VOC</td>
<td>every 5 years</td>
<td>326 IAC 2-1.1-11 326 IAC 2-7-5(1) 326 IAC 2-7-6(1)</td>
</tr>
<tr>
<td>Manual Rubber Lining Operation (PO16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regenerative Thermal Oxidizer CE016</td>
<td>3-hour average oxidizer temperature monitoring</td>
<td>Continuous</td>
<td>At or above the value established in the most recent compliant stack test</td>
</tr>
<tr>
<td></td>
<td>Duct pressure or fan amperage monitoring</td>
<td>Daily</td>
<td>Within normal range established in the most recent compliant stack test</td>
</tr>
</tbody>
</table>

The last valid test for the regenerative thermal oxidizer CE016 was performed on May 3, 2018.

These monitoring conditions are necessary because the regenerative thermal oxidizer CE016 for the manual gluing operation (PO12) and the manual rubber lining operation (PO16) must operate properly to assure compliance with 326 IAC 8-1-6 (BACT).

Proposed Changes

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes listed below are due to the proposed modification. Deleted language appears as strikethrough text and new language appears as bold text (these changes may include Title I changes):
(1) Sections A.1, D.1, and E.1 have been modified to include the revised emission unit description for the manual gluing operation PO12.

(2) Section D.1 has been modified to include the BACT requirements and associated compliance determination and monitoring and recordkeeping requirements.

(3) The reporting forms associated with the manual gluing operation PO12 and the manual rubber lining operation PO16 have been removed from the permit.

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

<table>
<thead>
<tr>
<th>Emissions Unit Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;</td>
</tr>
<tr>
<td>This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.</td>
</tr>
<tr>
<td>(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;</td>
</tr>
<tr>
<td>This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.</td>
</tr>
<tr>
<td>(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)</td>
</tr>
</tbody>
</table>

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

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable, the source shall comply with the following:

(a) The combined VOC input, including coatings, dilution solvents and cleaning solvents, for the manual gluing operation (PO12), shall be less than 24.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The combined VOC input, including coatings, dilution solvents and cleaning solvents, for the manual rubber lining operation (PO16), shall be less than 24.90 tons per twelve (12)
consecutive month period, with compliance determined at the end of each month.

Compliance with these limits shall limit the VOC emissions from the manual gluing operation and manual rubber lining operation to less than twenty-five (25) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable.

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Permittee shall comply with the following limitations for the manual gluing operation PO12 and the manual rubber lining operation PO16:

(a) The VOC emissions from the manual gluing operation (PO12) and the manual rubber lining operation (PO16) shall each be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation and the manual rubber lining operation are in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices shall be adopted – including storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.

Compliance with the above shall satisfy the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) for the use of the manual gluing operation (PO12) and the manual rubber lining operation (PO16).

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

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee’s obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.3 Volatile Organic Compounds (VOCs) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC input limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.3 Thermal Oxidizer Operation

In order to ensure compliance with Condition D.1.1, the regenerative thermal oxidizer shall be in operation and control emissions from the manual gluing operation (PO12) and the manual rubber lining operation (PO16) at all times the manual gluing operation (PO12) and the manual rubber lining operation (PO16) are each in operation.

D.1.4 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition D.1.1, the Permittee shall conduct a performance test to verify the overall VOC control efficiency (including capture and destruction efficiency) of the regenerative thermal oxidizer, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C - Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.
Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Thermal Oxidizer Temperature

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

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

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

(d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.6 Parametric Monitoring

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

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

(c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.47 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC input limits established in Conditions D.1.1:

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
(3) The total VOC input for each month; and

(4) The total VOC input for each compliance period;

(a) To document the compliance status with Condition D.1.5, the Permittee shall maintain continuous temperature records (on a 3-hour average basis) for the regenerative thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its daily record when a 3-hour average temperature record is not taken and the reason for the lack of a 3-hour average temperature record (e.g., the process did not operate that day).

(b) To document the compliance status with Condition D.1.6, the Permittee shall maintain daily records of the duct pressure or fan amperage and the duct pressure or fan amperage used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its daily record when a duct pressure or fan amperage record is not taken and the reason for the lack of duct pressure or fan amperage record (e.g., the process did not operate that day).

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

D.1.5 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1 shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(34).

*****

SECTION E.1 NESHAP

Emissions Unit Description:

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

Insignificant activities:

(b) One (1) natural gas-fired regenerative thermal oxidizer (RTO), identified as CE016, constructed in 2015, with a maximum heat input capacity of 3.0 MMBtu/hr and an operating set point between 1,400 °F and 1,700 °F, and exhausting to stack S016;
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

*****
Source Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, Indiana 46534
Part 70 Permit No.: T149-41337-00028
Facility: PO12
Parameter: VOC Input
Limit: The combined VOC input, including coatings, dilution solvents and cleaning solvents, for the manual gluing operation (PO12), shall be less than 24.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER:</th>
<th>YEAR:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC Input (PO12) (tons)</td>
<td>VOC Input (PO12) (tons)</td>
<td>VOC Input (PO12) (tons)</td>
</tr>
<tr>
<td>This Month</td>
<td>Previous 11 Months</td>
<td>12-Month Total</td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
   Deviation has been reported on: ___________________

Submitted by: ____________________________
Title / Position: __________________________
Signature: _______________________________
Date: _________________________________
Phone: _________________________________
Source Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, Indiana 46534
Part 70 Permit No.: T149-41337-00028
Facility: PO16
Parameter: VOC Input
Limit: The combined VOC input, including coatings, dilution solvents and cleaning solvents, for the manual rubberlining operation (PO16), shall be less than 24.90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER:</th>
<th>YEAR:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC Input (PO16) (tons)</td>
<td>VOC Input (PO16) (tons)</td>
<td>VOC Input (PO16) (tons)</td>
</tr>
<tr>
<td>This Month</td>
<td>Previous 11 Months</td>
<td>12-Month Total</td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.

Deviation has been reported on: ___________________

Submitted by: ____________________________________________
Title / Position: _________________________________________
Signature: ______________________________________________
Date: ________________________________________________
Phone: ________________________________________________
Additional Changes

IDEM, OAQ made additional changes to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

These permit changes include model updates to standard permit language that are applicable to this source,

(1) IDEM, OAQ has made model updates to standard permit language in the Sections B and C of the permit to help clarify the intent of these requirements.

(2) The phone and fax numbers for the Northern Regional Office have been added to Condition B.11, since this source is located in Starke County.

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

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

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

and

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

*****

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

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

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

*****

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7] 

(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.

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

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

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(9d).

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 1, 2021.

This proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 149-43822-00028. The operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Permit Modification No. 149-43947-00028.

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Natalie Moore, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-8279 or (800) 451-6027, and ask for Natalie Moore or (317) 233-8279.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/2358.htm; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/6900.htm.
## Appendix A: Emissions Calculations

### Emission Summary

- **Company Name:** Reagent Chemical & Research, Inc.
- **Source Address:** 1705 West Pacific Ave., Knox, IN 46534
- **Source Modification Number:** 149-43822-00028
- **Permit Modification Number:** 149-43947-00028
- **Reviewer:** Natalie Moore

### Uncontrolled Potential to Emit (tons/yr)

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Single HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCL Transfer / PO10</td>
<td></td>
<td></td>
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<td></td>
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<td>4.32E-03</td>
<td>HCL</td>
</tr>
<tr>
<td>HCL Transfer / PO14</td>
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<td></td>
<td>0.03</td>
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<tr>
<td>Blasting / PO11</td>
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<td>Blasting / PO15</td>
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<td></td>
<td></td>
<td></td>
<td>2.81E-05</td>
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<tr>
<td>Blasting / PO12</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<td>30.56</td>
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<tr>
<td>Blasting / PO18</td>
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<td>107.74</td>
<td>107.74</td>
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<td></td>
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<tr>
<td>Total PTE*</td>
<td>232.01</td>
<td>185.92</td>
<td>185.92</td>
<td>0.01</td>
<td>1.45</td>
<td>64.21</td>
<td>1.22</td>
<td>56.05</td>
<td>Toluene</td>
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</table>

### Fugitive Emissions

- **Unpaved Roads:**
  - Total Fugitive Emissions: 0.45

### Potential to Emit After Issuance (tons/yr)

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Single HAP</th>
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<tbody>
<tr>
<td>HCL Transfer / PO10</td>
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<td>HCL</td>
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<td>HCL</td>
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<tr>
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<tr>
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<tr>
<td>Blasting / PO18</td>
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<td></td>
<td>56.05</td>
<td>Toluene</td>
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<tr>
<td>Total PTE*</td>
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<td>0.01</td>
<td>1.45</td>
<td>1.52</td>
<td>1.22</td>
<td>56.05</td>
<td>Toluene</td>
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</table>

### Fugitive Emissions

- **Unpaved Roads:**
  - Total Fugitive Emissions: 0.45

*Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, and Part 70 Permit applicability.
## Appendix A: Emission Calculations
### Hazardous Air Pollutants (HAP) Emissions Summary

**Company Name:** Reagent Chemical & Research, Inc.

**Source Address:** 1705 West Pacific Ave., Knox, IN 46534

**Source Modification Number:** 149-43822-00028

**Permit Modification Number:** 149-43947-00028

**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Emission Units</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Xylene</th>
<th>HCL</th>
<th>Ethyl Benzene</th>
<th>Methanol</th>
<th>Naphthalene</th>
<th>HAPs - Metal</th>
<th>Total HAPs</th>
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</thead>
<tbody>
<tr>
<td>HCL Transfer / PO10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.32E-03</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.36</td>
<td>4.32E-03</td>
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<tr>
<td>HCL Transfer / PO14</td>
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<td>0.03</td>
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<tr>
<td>Blasting / PO11</td>
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<td>-</td>
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<td>Blasting / PO15</td>
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<tr>
<td>Gluing Operation / PO12</td>
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<td>1.26E-03</td>
<td>-</td>
<td>25.50</td>
<td>4.08</td>
<td>-</td>
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<td>-</td>
<td>30.56</td>
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<td>Rubberlining Operation / PO16</td>
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<td>0.01</td>
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<td>-</td>
<td>25.34</td>
<td>25.34</td>
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<tr>
<td>Natural Gas Combustion / PO13 and CEO16</td>
<td>3.04E-05</td>
<td>1.74E-05</td>
<td>1.09E-03</td>
<td>0.03</td>
<td>4.92E-05</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>7.93E-05</td>
<td>0.03</td>
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<tr>
<td>Welding Operation / PO17</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.07</td>
<td>0.07</td>
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<tr>
<td>Blasting / PO18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Parts Washer / PO19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.57E-03</td>
<td>-</td>
<td>1.57E-03</td>
<td>-</td>
<td>0.02</td>
<td>-</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Total HAPs</strong></td>
<td>3.04E-05</td>
<td>1.74E-05</td>
<td>3.38E-03</td>
<td>2.60E-02</td>
<td>46.72</td>
<td>7.41</td>
<td>0.03</td>
<td>1.75</td>
<td>0.03</td>
<td>0.02</td>
<td>0.07</td>
<td>56.05</td>
</tr>
</tbody>
</table>

**Potential to Emit After Issuance (tons/yr):**
Appendix A: Emission Calculations
HCl emissions from HCl Transfer PO10

Company Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, IN 46534
Source Modification Number: 149-43822-00028
Permit Modification Number: 149-43947-00028
Reviewer: Natalie Moore

HCl Emissions

<table>
<thead>
<tr>
<th>Process ID</th>
<th>Product Stored</th>
<th>Scrubber Control Efficiency (%)</th>
<th>Uncontrolled HAP Breathing Losses (lbs/hr)</th>
<th>Uncontrolled HAP Breathing Losses (tons/yr)</th>
<th>Controlled HAP Breathing Losses (lbs/hr)</th>
<th>Controlled HAP Breathing Losses (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO10</td>
<td>HCl</td>
<td>99.00%</td>
<td>9.86E-04</td>
<td><strong>4.32E-03</strong></td>
<td>9.86E-06</td>
<td><strong>4.32E-05</strong></td>
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</tbody>
</table>

Methodology:

Uncontrolled HAP Breathing Losses (lbs/hr):

\[
\text{Worst Case: ft}^3/\text{day} = (\text{Tank Size (gal)}) \times (\text{# of Tanks}) \times (1 \text{ ft}^3/7.48 \text{ gal}) \times (((460 + (\text{Avg Temp} + \text{Temp Rise}))/460 + \text{Avg Temp}))-1
\]

\[
\text{Displacement over 8 Hr heating period: ACFM} = (\text{ft}^3/\text{day}) \times (1 \text{ day/8 Hr temp rise}) \times (1\text{Hr/60 min}) = 1.12E-02
\]

\[
\text{Potential Emissions due to Breathing: lbs HCl/min} = (11.8 \text{ mmHg Vapor Pressure}) \times (1/760 \text{ mmHg}) \times (36.46 \text{ lbs/lb/mol}) \times (1 \text{ lb/mol}/386 \text{ ft}^3) \times (\text{ACFM/min}) = 1.64E-05
\]

\[
\text{Potential Emissions due to Breathing: lbs HCl/hr} = (\text{lbs HCl/min}) \times (60 \text{ min/hr}) = 9.86E-04
\]

Uncontrolled HAP Breathing Losses (tons/yr) = Uncontrolled HAP Breathing Losses (lbs/hr) * 8,760 hrs / 2,000 lbs

Controlled HAP Breathing Losses (lbs/hr) = Uncontrolled HAP Breathing Losses (lbs/hr) * (1 - Scrubber Control Efficiency)

Controlled HAP Breathing Losses (tons/yr) = Controlled HAP Breathing Losses (lbs/hr) * 8,760 hrs / 2,000 lbs

Notes:

- Avg Annual Temperature (F) = 49.3°
- Avg Temperature Rise/ 8hr Period = 20.5° (F)
- Vapor Pressure of 31.5% HCl @ 12.2° C = 11.80 mmHg
- Vessel Size = 1,000 gallons
- No. Tanks = 1
### Table 1 - Emission Factors for Abrasives

<table>
<thead>
<tr>
<th>Abrasive</th>
<th>lb PM / lb abrasive</th>
<th>lb PM10 / lb PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>0.041</td>
<td>0.70</td>
</tr>
<tr>
<td>Grit</td>
<td>0.010</td>
<td>0.70</td>
</tr>
<tr>
<td>Steel Shot</td>
<td>0.004</td>
<td>0.86</td>
</tr>
<tr>
<td>Black Beauty (Other)</td>
<td>0.010</td>
<td>1.00</td>
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</table>

### Table 2 - Density of Abrasives (lb/ft3)

<table>
<thead>
<tr>
<th>Abrasive</th>
<th>Density (lb/ft3)</th>
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<tr>
<td>Al oxides</td>
<td>160</td>
</tr>
<tr>
<td>Sand</td>
<td>99</td>
</tr>
<tr>
<td>Steel</td>
<td>487</td>
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<tr>
<td>Black Beauty</td>
<td>100</td>
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### Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

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<tr>
<th>Nozzle Type (diameter)</th>
<th>Internal diameter, in</th>
<th>Flow rate (FR1)</th>
</tr>
</thead>
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<tr>
<td>No. 2 (1/8 inch)</td>
<td>0.125</td>
<td>28</td>
</tr>
<tr>
<td>No. 3 (3/16 inch)</td>
<td>0.1875</td>
<td>65</td>
</tr>
<tr>
<td>No. 4 (1/4 inch)</td>
<td>0.25</td>
<td>106</td>
</tr>
<tr>
<td>No. 5 (5/32 inch)</td>
<td>0.3125</td>
<td>205</td>
</tr>
<tr>
<td>No. 6 (1/8 inch)</td>
<td>0.375</td>
<td>235</td>
</tr>
<tr>
<td>No. 7 (7/64 inch)</td>
<td>0.4375</td>
<td>385</td>
</tr>
<tr>
<td>No. 8 (1/2 inch)</td>
<td>0.5</td>
<td>503</td>
</tr>
<tr>
<td>No. 9 (5/32 inch)</td>
<td>0.625</td>
<td>635</td>
</tr>
<tr>
<td>No. 10 (11/32 inch)</td>
<td>0.75</td>
<td>870</td>
</tr>
<tr>
<td>No. 11 (1 inch)</td>
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<td>2030</td>
</tr>
<tr>
<td>No. 16 (2 inch)</td>
<td>2</td>
<td>4260</td>
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</table>

### Calculations

- **Adjusting Flow Rates for Different Abrasives and Nozzle Diameters**
  
  \[
  D = \text{Density of actual abrasive} = 100 \text{ lb/ft}^3
  \]
  
  \[
  ID = \text{Internal diameter of actual nozzle} = 0.4375 \text{ inch}
  \]
  
  \[
  FR = \text{Flow rate of actual abrasive (lb/hr)} = 849.5 \text{ lb/hr (per nozzle)}
  \]

- **Potential to Emit Before Control**
  
  \[
  PM = 9.49 \text{ lb/hr}
  \]
  
  \[
  PM10 = 820 \text{ lb/hr}
  \]

- **Potential to Emit After Control**
  
  \[
  PM = 41.59 \text{ lb/hr}
  \]
  
  \[
  PM10 = 41.59 \text{ lb/hr}
  \]

- **Methodology**
  

  Flow rate of actual abrasive (FR) (lb/hr) = FR1 \times (ID/ID1)^2 \times (D/D1)

  Potential to Emit (before control) = EF \times FR \times (1 - w/200) \times N

  Potential to Emit (after control) = \left(\text{Potential to Emit (before control)}\right) \times \left(1 - \text{control efficiency}\right)

  Potential to Emit (tons/year) = \left(\text{Potential to Emit (lbs/hour)}\right) \times \left(3650 \text{ hours/year}\right) \times \left(\text{ton/2000 lbs}\right)

- **Note**
  
  Assumed PM10 = PM2.5

  Abrasive, Nozzle Size, and Nozzle Pressure provided by source.
## Appendix A: Emissions Calculations
### VOC and Particulate

#### From Railcar Gluing Operation PO12

- **Company Name:** Reagent Chemical & Research, Inc.
- **Source Address:** 1705 West Pacific Ave., Knox, IN 46534
- **Source Modification Number:** 149-43822-00028
- **Permit Modification Number:** 149-43847-00028
- **Reviewer:** Natalie Moore

#### Material Density

| Material                | Density (Lb/Gal) | Weight % Volatile (H2O & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | B VOC/gal solids | Transfer Efficiency |
|-------------------------|------------------|-----------------------------------|----------------|-------------------|---------------|----------------------------------|------------------------|--------------------|-------------------------------------------|--------------------------------|-----------------------------|-------------------------------|-------------------------|--------------------------|----------------------|
| Chemlok 289 Primer      | 7.82             | 75.85%                            | 0.0%           | 75.8%             | 0.0%          | 14.18%                           | 1.47400               | 0.250              | 5.93                                                     | 5.93                                            | 2.19                                        | 52.46                                 | 9.57                   | 0.00                     | 40.13                 |
| Chemlok 290 Covercoat   | 7.32             | 92.50%                            | 0.0%           | 92.5%             | 0.0%          | 7.5%                             | 0.73700               | 0.250              | 6.77                                                     | 6.77                                            | 1.25                                        | 29.94                                 | 5.46                   | 0.00                     | 107.65                |
| Chemlok 286 Tacky Tie Cement | 7.44           | 85.00%                            | 0.0%           | 85.0%             | 0.0%          | 12.17%                           | 2.88400               | 0.250              | 6.32                                                     | 6.32                                            | 4.96                                        | 109.43                                | 19.97                  | 0.00                     | 51.96                 |

#### Methodology:

- **Pounds of VOC per Gallon Coating less Water:** \( \text{Density (lb/gal)} \times \text{Weight % Organics} / (1-\text{Volume % water}) \)
- **Pounds of VOC per Gallon Coating:** \( \text{Density (lb/gal)} \times \text{Weight % Organics} \)
- **Potential VOC Pounds per Day:** \( \text{Pounds of VOC per Gallon Coating (lb/gal)} \times \text{Gal of Material (gal/unit)} \times \text{Maximum (units/hr)} \)
- **Potential VOC Tons per Year:** \( \text{Pounds of VOC per Gallon of Solids} = \text{Density (lb/gal)} \times \text{Weight % organics} / (\text{Volume % solids}) \)
- **Controlled VOC Emissions:** \( \text{Potential VOC Tons per Year} \times (1 - \text{RTO Control Efficiency}) \)

#### Hazardous Air Pollutants (HAPs)

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<tbody>
<tr>
<td>Chemlok 289 Primer</td>
<td>7.82</td>
<td>1.47400</td>
<td>0.250</td>
<td>32.34%</td>
<td>0.71%</td>
<td>92.28%</td>
<td>0.00%</td>
<td>4.08</td>
<td>0.09</td>
<td>0.96</td>
<td>1.26E-03</td>
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<tr>
<td>Chemlok 290 Covercoat</td>
<td>7.32</td>
<td>0.73700</td>
<td>0.250</td>
<td>0.00%</td>
<td>92.86%</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Chemlok 286 Tacky Tie Cement</td>
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<td>2.88400</td>
<td>0.250</td>
<td>0.00%</td>
<td>84.97%</td>
<td>0.00%</td>
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<td>0.00</td>
<td>19.96</td>
<td>0.00</td>
<td>0.00</td>
</tr>
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</table>

#### Methodology:

- **HAPS emission rate (tons/yr) = Density (lb/gal) \times \text{Gal of Material (gal/unit)} \times \text{Maximum (units/hr)} \times \text{Weight % HAP} \times 8760 \text{hrs/yr} \times 1 \text{ton/2000 lbs}**
### Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

**Company Name:** Reagent Chemical & Research, Inc.
**Source Address:** 1705 West Pacific Ave., Knox, IN 46534
**Source Modification Number:** 149-43822-00028
**Permit Modification Number:** 149-43947-00028
**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Unit</th>
<th>Heat Input Capacity</th>
<th>HHV</th>
<th>Potential Throughput</th>
</tr>
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<tr>
<td>RTO CEO16</td>
<td>3</td>
<td>1.9</td>
<td>1020</td>
</tr>
<tr>
<td>Boiler PO13</td>
<td>0.37</td>
<td>7.6</td>
<td>28.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.4</strong></td>
<td><strong>7.6</strong></td>
<td><strong>1020</strong></td>
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<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM*</th>
<th>PM10*</th>
<th>direct PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMCF</td>
<td>0.03</td>
<td>0.11</td>
<td>0.11</td>
<td>0.01</td>
<td>1.45</td>
<td>0.08</td>
<td>1.22</td>
</tr>
</tbody>
</table>

**Methodology**
All emission factors are based on normal firing.

- MMBlu = 1,000,000 Btu
- MMCF = 1,000,000 Cubic Feet of Gas
- Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
- Potential Throughput (MMCF) = Heat Input Capacity (MMBlu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
- Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

### Hazardous Air Pollutants (HAPs)

#### HAPs - Organics

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>2.1E-03</td>
<td>1.2E-03</td>
<td>7.5E-02</td>
<td>1.8E+00</td>
<td>3.4E-03</td>
<td>0.03</td>
</tr>
</tbody>
</table>

#### HAPs - Metals

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>7.2E-06</td>
<td>1.6E-05</td>
<td>2.0E-05</td>
<td>5.5E-06</td>
<td>3.0E-05</td>
<td>7.9E-05</td>
</tr>
</tbody>
</table>

**Methodology** is the same as above.

- The five highest organic and metal HAPs emission factors are provided above.
- Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Note:**
- PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
- PM2.5 emission factor is filterable and condensable PM2.5 combined.
- *Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
Appendix A: Emission Calculations
HCl emissions from Heel Transfer PO14

Company Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, IN 46534
Source Modification Number: 149-43822-00028
Permit Modification Number: 149-43947-00028
Reviewer: Natalie Moore

### HCl Emissions

<table>
<thead>
<tr>
<th>Process ID</th>
<th>Product Stored</th>
<th>Scrubber Control Efficiency (%)</th>
<th>Uncontrolled HAP Breathing Losses (lbs/hr)</th>
<th>Uncontrolled HAP Breathing Losses (tons/yr)</th>
<th>Controlled HAP Breathing Losses (lbs/hr)</th>
<th>Controlled HAP Breathing Losses (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO14</td>
<td>HCl</td>
<td>99.90%</td>
<td>6.41E-03</td>
<td>0.03</td>
<td>6.41E-06</td>
<td>2.81E-05</td>
</tr>
</tbody>
</table>

**Methodology:**

Uncontrolled HAP Breathing Losses (lbs/hr):

- Worst Case: ft³/day = (Tank Size (gal)) * (# of Tanks) * (1 ft³/7.48 gal) * ((460+ (Avg Temp + Temp Rise))/(460 + Avg Temp)-1) = \(34.98\)
- Displacement over 8 Hr heating period: ACFM = (ft³/day) * (1 day/8 Hr temp rise) * (1 Hr/60 min) = \(7.29E-02\)
- Potential Emissions due to Breathing: lbs HCl/min = (11.8 mmHg Vapor Pressure) * (1/760 mmHg) * (36.46 lbs/1 lb/mol) * (1 lb/mol/386 ft³) * (ACFM/min) = \(1.07E-04\)
- Potential Emissions due to Breathing: lbs HCl/hr = (lbs HCl/min) * (60 min/hr) = \(6.41E-03\)

Controlled HAP Breathing Losses (tons/yr) = Uncontrolled HAP Breathing Losses (tons/yr) * 8,760 hrs / 2,000 lbs

Controlled HAP Breathing Losses (lbs/hr) = Uncontrolled HAP Breathing Losses (lbs/hr) * (1 - Scrubber Control Efficiency)

Notes:

- Avg Annual Temperature (F) = 49.3°
- Avg Temperature Rise/ 8hr Period = 20.5° (F)
- Vapor Pressure of 31.5% HCl @ 12.2° C = 11.80 mmHg
- Vessel Size = 6,500 gallons
- No. Tanks = 1
Appendix A: Emission Calculations

Ablasive Blasting Unit PO15

Company Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, IN 46534
Source Modification Number: 149-43822-00028
Permit Modification Number: 149-43947-00028
Reviewer: Natalie Moore

Table 1 - Emission Factors for Abrasives

<table>
<thead>
<tr>
<th>Abrasive</th>
<th>lb PM / lb abrasive</th>
<th>lb PM10 / lb PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>0.041</td>
<td>0.70</td>
</tr>
<tr>
<td>Grit</td>
<td>0.010</td>
<td>0.70</td>
</tr>
<tr>
<td>Steel Shot</td>
<td>0.004</td>
<td>0.86</td>
</tr>
<tr>
<td>Black Beauty</td>
<td>0.010</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 2 - Density of Abrasives (lb/ft³)

<table>
<thead>
<tr>
<th>Abasive</th>
<th>Density (lb/ft³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al oxides</td>
<td>160</td>
</tr>
<tr>
<td>Steel</td>
<td>487</td>
</tr>
<tr>
<td>Black Beauty</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

<table>
<thead>
<tr>
<th>Nozzle Type (diameter)</th>
<th>Internal diameter, in.</th>
<th>Nozzle Pressure (psig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 2 (1/8 inch)</td>
<td>0.125</td>
<td>90</td>
</tr>
<tr>
<td>No. 3 (3/16 inch)</td>
<td>0.375</td>
<td>35</td>
</tr>
<tr>
<td>No. 4 (1/4 inch)</td>
<td>0.625</td>
<td>15</td>
</tr>
<tr>
<td>No. 5 (5/16 inch)</td>
<td>0.75</td>
<td>70</td>
</tr>
<tr>
<td>No. 6 (3/8 inch)</td>
<td>1.00</td>
<td>185</td>
</tr>
<tr>
<td>No. 7 (7/16 inch)</td>
<td>1.25</td>
<td>209</td>
</tr>
<tr>
<td>No. 8 (1/2 inch)</td>
<td>1.50</td>
<td>235</td>
</tr>
<tr>
<td>No. 10 (5/8 inch)</td>
<td>1.75</td>
<td>261</td>
</tr>
<tr>
<td>No. 12 (3/4 inch)</td>
<td>2.00</td>
<td>287</td>
</tr>
</tbody>
</table>

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) of abrasive at nozzle pressure and internal nozzle diameter (ID)

D = Density of actual abrasive = 100 lb/ft³
ID = Internal diameter of actual nozzle = 0.375 inch
FR = Flow rate of actual abrasive (lb/hr) = 727.3 lb/hr (per nozzle)

Potential to Emit Before Control

FR = Flow rate of actual abrasive (lb/hr) = 727.3 lb/hr (per nozzle)
w = fraction of time of wet blasting = 0%
N = number of nozzles = 1
EF = PM emission factor for actual abrasive from Table 1 = 0.010 lb PM/ lb abrasive
PM10 emission factor ratio for actual abrasive from Table 1 = 1.00 lb PM10 / lb PM

Potential to Emit (before control) = PM x FR x (1 - w/200) x N

PM = PM10

Potential to Emit (before control) = 7.273 lb/hr
= 174.55 lb/day
= 31.85 ton/yr

Methodology:


Flow rate of actual abrasive (FR) (lb/hr) = FR1 x (ID/ID1)^2 x (D/D1)

Notes:

Assumed PM10 = PM2.5
Ablative, Nozzle Size, and Nozzle Pressure provided by source.
### Appendix A: Emissions Calculations

#### VOC and Particulate

**From Truck Rubberlining Operation PO16**

**Company Name:** Reagent Chemical & Research, Inc.
**Source Address:** 1705 West Pacific Ave., Knox, IN 46534
**Source Modification Number:** 149-43822-00028
**Permit Modification Number:** 149-43947-00028
**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lb/Gal)</th>
<th>Material Density (lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Weight % Organics</th>
<th>Volume % Water</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Maximum (unit/hour)</th>
<th>Pounds VOC per gallon of coating less water</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Particulate Potential (ton/yr)</th>
<th>Ib VOC/gal solids</th>
<th>Transfer Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemlok 289 Primer</td>
<td>7.82</td>
<td>75.85%</td>
<td>0.0%</td>
<td>75.9%</td>
<td>0.0%</td>
<td>14.78%</td>
<td>6.00</td>
<td>0.050</td>
<td>5.93</td>
<td>1.78</td>
<td>42.71</td>
<td>7.79</td>
<td>0.00</td>
<td>40.13</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Chemlok 290 Covercoat</td>
<td>7.32</td>
<td>92.50%</td>
<td>0.0%</td>
<td>92.5%</td>
<td>0.0%</td>
<td>7.50%</td>
<td>4.00</td>
<td>0.050</td>
<td>6.77</td>
<td>1.35</td>
<td>32.50</td>
<td>5.93</td>
<td>0.00</td>
<td>107.05</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Chemlok 286 Tacky Tie Cement</td>
<td>7.44</td>
<td>85.00%</td>
<td>0.0%</td>
<td>85.0%</td>
<td>0.0%</td>
<td>12.17%</td>
<td>11.00</td>
<td>0.050</td>
<td>6.32</td>
<td>3.48</td>
<td>83.48</td>
<td>15.23</td>
<td>0.00</td>
<td>91.96</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Total Potential to Emit: 6.61 158.68 28.96 0.00

**Methodology:**

- Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
- Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
- Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
- Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
- Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemlok 289 Primer</td>
<td>7.82</td>
<td>6.00</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.32</td>
<td>0.07</td>
<td>0.17</td>
<td>1.03E-03</td>
<td>0.00</td>
</tr>
<tr>
<td>Chemlok 290 Covercoat</td>
<td>7.32</td>
<td>0.050</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>Chemlok 286 Tacky Tie Cement</td>
<td>7.44</td>
<td>11.00</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Total Potential to Emit Individual HAPs: 3.32 21.22 0.78 1.03E-03 0.01

Total Potential to Emit Combined HAPs: 25.34

**Methodology:**

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
## Appendix A: Emissions Calculations

### Welding and Plasma Cutting (P017)

**Company Name:** Reagent Chemical & Research, Inc.  
**Source Address:** 1705 West Pacific Ave., Knox, IN 46534  
**Source Modification Number:** 149-43822-00028  
**Permit Modification Number:** 149-43947-00028  
**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Process</th>
<th>Number of Stations</th>
<th>Maximum electrode consumption per station (lbs/hr)</th>
<th>Maximum electrode consumption per station (lbs/day)</th>
<th>Emission Factors* (lb pollutant/lb electrode)</th>
<th>Potential to Emit (lbs/hr)</th>
<th>HAPs (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Inert Gas (MIG)(carbon steel)</td>
<td>3</td>
<td>2.5</td>
<td>60</td>
<td>0.0055</td>
<td>0.0156</td>
<td>0.0005</td>
</tr>
<tr>
<td>Stick (E7018 electrode)</td>
<td>3</td>
<td>1</td>
<td>24</td>
<td>0.0211</td>
<td>0.0003</td>
<td>0.0005</td>
</tr>
<tr>
<td>Tungsten Inert Gas (TIG)(carbon steel)</td>
<td>3</td>
<td>2.5</td>
<td>60</td>
<td>0.0055</td>
<td>0.0156</td>
<td>0.0005</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process</th>
<th>Number of Stations</th>
<th>Maximum Metal Thickness (inches)</th>
<th>Maximum Metal Cutting Rate (inches/minute)</th>
<th>Maximum Metal Cutting Rate (inches/hour)</th>
<th>Emission Factors** (lb pollutant/1,000 inches cut, 1 inch thick)**</th>
<th>Potential to Emit (lbs/hr)</th>
<th>HAPs (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flame Cutting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxyacetylene</td>
<td>3</td>
<td>1.5</td>
<td>30</td>
<td>1800</td>
<td>0.0039</td>
<td>0.0014</td>
<td>0.0002</td>
</tr>
<tr>
<td>Plasma**</td>
<td>2</td>
<td>1.5</td>
<td>30</td>
<td>1800</td>
<td>0.0039</td>
<td>0.0014</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

| Totals                             |                    |                                  |                                          |                                         |                                                                     |                           |              |
|                                    |                    |                                  |                                          |                                         |                                                                     | 1.06                      | 1.3E-02      |
| Potential to Emit (lbs/hr)         |                    |                                  |                                          |                                         |                                                                     | 25.36                     | 0.310        |
| Potential to Emit (tons/year)      |                    |                                  |                                          |                                         |                                                                     | 4.63                      | 0.01         |

### Methodology:

- Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
- Emission Factors for plasma cutting are from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 mm/min cutting speed (0.2 g/min emitted).
- Using AWS average values: 0.25 g/min/3.6 m/min x (0.022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick.
- Plasma cutting: Potential to Emit (lbs/hr) = (Number of stations) x (Maximum Metal Cutting Rate, inches/minute) x (60 minutes/hr) x (Emission Factor, lb pollutant/1,000 inches cut, 8 mm thick)
- Cutting: Potential to Emit (lbs/hr) = (Number of stations) x (Maximum Metal Thickness, inches) x (Maximum Metal Cutting Rate, inches/minute) x (60 minutes/hour) x (Emission Factor, lb pollutant/1,000 inches cut, 1" thick)
- Welding: Potential to Emit (lbs/hr) = (Number of stations) x (Maximum electrode consumption per station, lbs/hr) x (Emission Factor, lb pollutant/lb of electrode used)
- Potential to Emit (lbs/day) = Potential to Emit (lbs/hr) x (24 hours/day)
- Potential to Emit (tons/year) = Potential to Emit (lbs/hr) x (8,760 hours/year) x (1 ton/2,000 lbs)

---

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 mm/min cutting speed (0.2 g/min emitted).

Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick.

Plasma cutting: Potential to Emit (lbs/hr) = (Number of stations) x (Maximum Metal Cutting Rate, inches/minute) x (60 minutes/hr) x (Emission Factor, lb pollutant/1,000 inches cut, 8 mm thick)

Cutting: Potential to Emit (lbs/hr) = (Number of stations) x (Maximum Metal Thickness, inches) x (Maximum Metal Cutting Rate, inches/minute) x (60 minutes/hour) x (Emission Factor, lb pollutant/1,000 inches cut, 1" thick)

Welding: Potential to Emit (lbs/hr) = (Number of stations) x (Maximum electrode consumption per station, lbs/hr) x (Emission Factor, lb pollutant/lb of electrode used)

Potential to Emit (lbs/day) = Potential to Emit (lbs/hr) x (24 hours/day)

Potential to Emit (tons/year) = Potential to Emit (lbs/hr) x (8,760 hours/year) x (1 ton/2,000 lbs)
Appendix A: Emission Calculations
Abrasives Blasting - Confined / PO18

Company Name: Reagent Chemical & Research, Inc.
Source Address: 1705 West Pacific Ave., Knox, IN 46534
Source Modification Number: 149-43822-00028
Permit Modification Number: 149-43947-00028
Reviewer: Natalie Moore

Table 1 - Emission Factors for Abrasives

<table>
<thead>
<tr>
<th>Abrasive</th>
<th>lb PM / lb abrasive</th>
<th>lb PM10 / lb PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>0.041</td>
<td>0.70</td>
</tr>
<tr>
<td>Grit</td>
<td>0.010</td>
<td>0.70</td>
</tr>
<tr>
<td>Steel Shot</td>
<td>0.004</td>
<td>0.86</td>
</tr>
<tr>
<td>Other</td>
<td>0.010</td>
<td></td>
</tr>
</tbody>
</table>

Potential to Emit Before Control

FR = Flow rate of actual abrasive (lb/hr) = 3514.00 lb/hr (per nozzle)
w = fraction of time of wet blasting = 0 %
N = number of nozzles = 1
EF = PM emission factor for actual abrasive from Table 1 = 0.010 lb PM/ lb abrasive
PM10 emission factor ratio for actual abrasive from Table 1 = 0.70 lb PM10 / lb PM

Potential to Emit Before Control = FR x (1 - w/200) x N

Potential to Emit Before Control = 35.14 lb/hr
Potential to Emit Before Control = 843.36 lb/day
Potential to Emit Before Control = 153.91 ton/yr

Potential to Emit After Control

Emission Control Device Efficiency = 99.0% 99.0% 99.0%

Potential to Emit After Control = Potential to Emit (before control) x (1 - control efficiency)

Potential to Emit After Control = 0.35 lb/hr
Potential to Emit After Control = 0.25 lb/day
Potential to Emit After Control = 1.54 ton/yr

METHODOLOGY
PM2.5 emissions assumed equal to PM10 emissions.
Potential to Emit (before control) = EF x FR x (1 - w/200) x N (where w should be entered in as a whole number (if w is 50%, enter 50))
Potential to Emit (after control) = [Potential to Emit (before control)] x [1 - control efficiency]
Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]
## Appendix A: Emissions Calculations

**Parts Washer PO19**

**Company Name:** Reagent Chemical & Research, Inc.  
**Source Address:** 1705 West Pacific Ave., Knox, IN 46534  
**Source Modification Number:** 149-43822-00028  
**Permit Modification Number:** 149-43947-00028  
**Reviewer:** Natalie Moore

### Material Properties

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Maximum Material Usage (gal/yr)</th>
<th>Weight % VOC</th>
<th>Weight % Naphthalene</th>
<th>Weight % Xylene</th>
<th>Weight % Ethyl Benzene</th>
<th>PTE of Naphthalene (tons/year)</th>
<th>PTE of Xylene (tons/year)</th>
<th>PTE of Ethyl Benzene (tons/year)</th>
<th>PTE of Total HAPs (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drummond Perpetrator</td>
<td>6.99</td>
<td>45.00</td>
<td>100.00%</td>
<td>12.50%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>0.16</td>
<td>0.02</td>
<td>1.57E-03</td>
<td>1.57E-03</td>
</tr>
</tbody>
</table>

**Methodology**

PTE of HAP (tons/year) = [Density (lbs/gal)] * [Maximum Material Usage (gal/unit)] * [Maximum Capacity (units/hour)] * [Weight % HAP] * [8760 hours/year] * [1 ton/2000 lbs]

PTE of Total HAPs (tons/year) = SUM (PTE of Each Single HAP (tons/year))

Hazardous air pollutant (HAP) is defined by Section 112(b) of the Clean Air Act.

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Maximum Material Usage (gal/yr)</th>
<th>Weight % VOC</th>
<th>Weight % Naphthalene</th>
<th>Weight % Xylene</th>
<th>Weight % Ethyl Benzene</th>
<th>PTE of Naphthalene (tons/year)</th>
<th>PTE of Xylene (tons/year)</th>
<th>PTE of Ethyl Benzene (tons/year)</th>
<th>PTE of Total HAPs (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drummond Perpetrator</td>
<td>6.99</td>
<td>45.00</td>
<td>100.00%</td>
<td>12.50%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>0.16</td>
<td>0.02</td>
<td>1.57E-03</td>
<td>1.57E-03</td>
</tr>
</tbody>
</table>

**Totals**

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.16</td>
<td>0.02</td>
<td>1.57E-03</td>
<td>1.57E-03</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
</tr>
</tbody>
</table>
Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight of Loaded Vehicle (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (miles/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>17.5</td>
<td>52.5</td>
<td>500</td>
<td>0.095</td>
<td>0.3</td>
<td>103.7</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>17.5</td>
<td>52.5</td>
<td>500</td>
<td>0.095</td>
<td>0.3</td>
<td>103.7</td>
</tr>
</tbody>
</table>

| | | | | | | | | | |
| Totals | 6.0 | 105.0 | 0.6 | 207.4 |

Average Vehicle Weight Per Trip = 17.5 tons/trip
Average Miles Per Trip = 0.09 miles/trip

Unmitigated Emission Factor, $E_f = k*(s/12)^a*(W/3)^b$ (Equation 1a from AP-42 13.2.2)

- $k = 4.9$ (PM), 1.5 (PM10), 0.15 (PM2.5) = particle size multiplier (AP-42 Table 13.2.2.2 for Industrial Roads)
- $s = 6.0$ (PM), 6.0 (PM10), 6.0 (PM2.5) = mean % silt content of unpaved roads (AP-42 Table 13.2.2.1 Iron and Steel Production)
- $a = 0.7$ (PM), 0.9 (PM10), 0.9 (PM2.5) = constant (AP-42 Table 13.2.2.2 for Industrial Roads)
- $W = 17.5$ (PM), 17.5 (PM10), 17.5 (PM2.5) = average vehicle weight
- $b = 0.45$ (PM), 0.45 (PM10), 0.45 (PM2.5) = constant (AP-42 Table 13.2.2.2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f * ((365 - P)/365)$ (Equation 2 from AP-42 13.2.2)

- $P = 125$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM10 (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (Before Control) (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>0.23</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>0.23</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Totals</td>
<td>0.45</td>
<td>0.12</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Methodology

- Total Weight driven per day (ton/day) = Sum of Total Weight driven per day (ton/day)
- Maximum one-way distance (miles/yr) = Maximum trips per year (trip/day) * Average Miles per Trip (miles/trip)
- Mitigated PTE (After Control) (tons/yr) = (Mitigated PTE (Before Control) (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

- P = Potential to Emit
- PM = Particulate Matter
- PM10 = Particulate Matter (<10 um)
- PM2.5 = Particulate Matter (<2.5 um)
- PM = Particulate Matter
- PM10 = Particulate Matter (<10 um)
- PM2.5 = Particulate Matter (<2.5 um)
Appendix B
Best Available Control Technology (BACT) Determination

Source Description and Location

<table>
<thead>
<tr>
<th>Source Name:</th>
<th>Reagent Chemical &amp; Research, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Location:</td>
<td>1705 West Pacific, Knox, Indiana 46534</td>
</tr>
<tr>
<td>County:</td>
<td>Starke</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>4789 (Transportation Services, NEC)</td>
</tr>
<tr>
<td></td>
<td>7699 (Repair Services and Related Services, Not Elsewhere Classified)</td>
</tr>
<tr>
<td>Operation Permit No.:</td>
<td>T149-41337-00028</td>
</tr>
<tr>
<td>Operation Permit Issuance Date:</td>
<td>February 3, 2020</td>
</tr>
<tr>
<td>Significant Source Modification No.:</td>
<td>149-43822-00028</td>
</tr>
<tr>
<td>Significant Permit Modification No.:</td>
<td>149-43947-00028</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>Natalie Moore</td>
</tr>
</tbody>
</table>

Background Information

On August 19, 2020, the Office of Air Quality received an application from Reagent Chemical & Research, Inc. (Reagent) relating to the removal of the existing 326 IAC 8-1-6 (BACT) avoidance limits for the manual gluing operation (PO12) and the manual rubber lining operation (PO16).

Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), Best Available Control Technology (BACT) is required for all facilities constructed after January 1, 1980 that have potential VOC emissions of equal to or greater than twenty-five (25) tons per year and are not regulated by other rules in 326 IAC 8.

Reagent is proposing to remove the existing 326 IAC 8-1-6 (BACT) avoidance limits for the two (2) following existing emission units. Since they each have the potential to emit greater than 25 tons of VOC per year and are not regulated by other rules under 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56, they are each therefore subject to the requirements of 326 IAC 8-1-6.

(a) One (1) Manual Gluing Operation, identified as PO12, constructed in 2008, modified in 2015, for gluing rubber lining into railcars, with a maximum capacity of 2 railcars per day, using HCl scrubber CE017 and regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.

(b) One (1) Manual Rubber Lining Operation, identified as PO16, constructed in 2011, modified in 2015, for gluing rubber lining into tank trucks, with a maximum capacity of 2 tank trucks per week, and a maximum coating usage of 21 gallons per tank truck, using regenerative thermal oxidizer CE016 as control, and exhausting to stack SO16;

This operation is an affected unit under the provision of 40 CFR 63, Subpart MMMM.
BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations.

Federal guidance on BACT requires an evaluation that follows a “top down” process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or controls achieved in practice. The highest level of control is then evaluated for technical and economic feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

**Step 1: Identify Potential Control Technologies**

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies and controls applied to similar source categories.

**Step 2: Eliminate Technically Infeasible Options**

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Only available and proven control technologies are evaluated. A control technology is considered available when there is sufficient data indicating that the technology results in confirmed reductions in emissions of regulated pollutants.

**Step 3: Rank the Remaining Control Technologies by Control Effectiveness**

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation.

**Step 4: Evaluate the Most Effective Controls and Document the Results**

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.
Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

The Office of Air Quality (OAQ) makes BACT determinations by following the five steps identified above.

A summary of the BACT reviews for the manual gluing operation (PO12) and the manual rubber lining operation (PO16) are provided below. This BACT determinations are based on the following information:

1. BACT analysis information submitted by Reagent
2. The EPA RACT/BACT/LAER (RBLC) Clearinghouse; and
3. State and local air quality permits.

### VOC BACT Analysis - Manual Gluing Operation (PO12)

**Step 1 – Identify All Potentially Available Control Options**

Based on the information reviewed for this BACT determination, the following potentially available control technologies were identified for controlling VOC emissions from the manual gluing operation (PO12):

(a) Housekeeping practices
   Implementing good housekeeping practices can reduce VOC losses. Such practices include: sealing lids on all containers, maintaining an organized spill response and clean-up operation, performing routine maintenance on coating equipment and pumps to prevent drips and seal leaks, and using aqueous, and/or exempt solvents where effective and practical.

(b) Inherently lower-polluting coatings – Low VOC/waterborne coatings
   Inherently lower-polluting processes or practices include the use of materials, production processes, and work practices that prevent emissions and result in lower "production-specific" emissions. For example, the use of a water-based coating instead of solvent-based coating.

(c) Regenerative Thermal Oxidizer
   Thermal oxidation is the process of oxidizing organic contaminants in a waste gas stream by raising the temperature above the auto ignition point in the presence of oxygen for sufficient time to completely oxidize the organic contaminants to carbon dioxide and water. The residence time, temperature, flow velocity and mixing, and the oxygen concentration in the combustion chamber affect the oxidation rate and destruction efficiency. Thermal oxidizers typically require combustion of an auxiliary fuel (e.g., natural gas) to maintain combustion chamber temperature high enough to completely oxidize the contaminant gases. Thermal oxidizers are typically designed to have a residence time of one second or less and combustion chamber temperatures between 1,200 and 2,000°F.
A regenerative thermal oxidizer uses a high-density media such as a packed ceramic bed, which was heated in a previous cycle, to preheat the incoming waste gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. Process gases pass through the RTO inlet isolation damper before entering the inlet of the RTO. Upon entering the RTO, the gases pass up through a heat recovery section (pre-heating mode), enter the combustion chamber where the VOCs are destroyed and then pass through another heat recovery section (heat recovery mode), and exit the system via the exhaust duct. A regenerative thermal oxidizer can be configured to have a two pass or three pass system, where the heat regeneration beds are passed by the gases either 2 or 3 times. For this application the theoretical thermal efficiency is increased from 90% for a two-pass system to 95% for a three-pass system. However, the three-pass system initial cost is higher and the required fan energy is also higher.

(d) Recuperative Thermal Oxidizer
Thermal recuperative oxidizers have a primary and/or secondary heat exchanger within the system. The difference between a recuperative oxidizer and a regenerative oxidizer is simply where the reclaimed heat is used. Essentially, the regenerative oxidizer puts the heat back into the process of destroying the VOCs, whereas a recuperative oxidizer routes the heat to another process instead (like cogeneration). Recuperative thermal oxidizers can achieve a destruction efficiency of 98%.

(e) Catalytic Incinerator
In a catalytic incinerator, a catalyst is used to lower the activation energy for oxidation. When a preheated gas stream is passed through a catalytic oxidizer, the catalyst bed initiates and promotes the oxidation of VOCs without being permanently altered itself. In catalytic incineration, combustion occurs at significantly lower temperatures than that of direct flame units and can achieve a destruction efficiency of 95%. However, steps must be taken to ensure complete combustion. Common types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese, and nickel. These catalysts are typically deposited in thin layers on an inert substrate, usually a honeycomb shaped ceramic. Catalytic incineration is not suited to systems with high exhaust volumes, variable types and concentrations of VOC, and where catalyst poisons or fouling contaminants are present.

(f) Carbon Adsorption
Carbon adsorption is a process, by which VOC is retained on a granular carbon surface, which is highly porous and has a very large surface-to-volume ratio. Adsorption is rapid and removes most of the VOC in the stream. Eventually, the adsorbent becomes saturated with the vapors and the system’s efficiency drops. The adsorbent must be regenerated or replaced soon after efficiency begins to decline. In regenerative systems, the adsorbent is reactivated with steam or hot air and the adsorbate (solvent) is recovered for reuse or disposal. Non-regenerative systems require the removal of the adsorbent and replacement with fresh or previously regenerated carbon.

(g) Bio-filtration
A Bio-filtration system is a land intensive setup in which contaminated air is fed under an active bed of soil or other substrate containing living microorganisms. As the air rises through the soil, the microorganisms consume and convert the organic materials in the air stream to carbon dioxide and water.

Step 2 – Eliminate Technically Infeasible Control Options

(a) Inherently lower-polluting coatings – Low VOC/waterborne coatings
Due to the hazardous and corrosive environment that the coatings and linings will be subjected to during the transportation of HCl, the Department of Transportation regulates which coatings are used in the preparation and manufacture of transportation equipment of HCl. This means
Reagent is not able to change adhesives in an attempt to lower VOC or HAP emissions or raise the solids content. Therefore, this technology is technically infeasible.

(b) Carbon Adsorption
Reagent previously utilized carbon adsorption technology prior to the installation of the regenerative thermal oxidizer in 2015. Reagent replaced the carbon bed adsorbers because they determined that the carbon bed adsorbers were incapable of reaching the necessary control standards when the rubber lining process was operating at maximum capacity.

Based on the information reviewed it has been determined that carbon adsorption is not technically feasible to control the VOC emissions.

(c) Bio-filtration
The operation at Reagent is intended to run only eight (8) hours a day and five (5) days a week. The microorganisms need to be fed contaminated air consistently to keep these bugs alive. Start up and shut down over weekends and at the end of the working day would prohibit the life of the microorganisms. Many times in active soil beds other bacteria begin to thrive and spread disease among the microorganisms intended on converting the chemicals to carbon dioxide and water. For these reasons, biofiltration was eliminated from future consideration.

Based on the information reviewed it has been determined that the use of Biofiltration is not technically feasible to control the VOC emissions.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness

IDEM, OAQ has ranked the technically feasible control technologies and combinations of control technologies as follows:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control Technology</th>
<th>Overall Control Efficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regenerative Thermal Oxidizer</td>
<td>98%</td>
</tr>
<tr>
<td>2</td>
<td>Recuperative Thermal Oxidizer</td>
<td>98%</td>
</tr>
<tr>
<td>3</td>
<td>Catalytic Incinerator</td>
<td>98%</td>
</tr>
<tr>
<td>4</td>
<td>Housekeeping Practices</td>
<td>NA†</td>
</tr>
</tbody>
</table>

*VOC reduction would occur but has not been quantified.

Step 4 – Evaluate the Most Effective Controls and Document Results

A review of EPA’s RACT/BACT/LAER Clearinghouse (RBLC) and Indiana Air Permits identified the following previous BACT determinations for sources that operate under the Process Codes 41.002 (Automobiles and Trucks Surface Coating (OEM)), 41.016 (Plastic Parts & Products Surface Coating (Except 41.015)) and 41.999 (Other Surface Coating/Printing/Graphic Arts Sources), as well as the process name keywords "glue" and "adhesive" in the RBLC. The table below is arranged based on how stringent the BACT determination is. Therefore, the table begins with the most stringent BACT determination, which requires the use of an add-on control device and ends with the least stringent BACT determination.

<table>
<thead>
<tr>
<th>Source Name</th>
<th>Date Issued and State</th>
<th>RBLC ID or IN Permit No.</th>
<th>Emission Unit</th>
<th>BACT Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reagent Chemical &amp; Research, Inc.</td>
<td>Proposed / IN</td>
<td>149-43822-00028</td>
<td>Manual Gluing Operation (PO12)</td>
<td>(a) The VOC emissions from the manual gluing operation (PO12) shall be controlled by a regenerative thermal oxidizer</td>
</tr>
<tr>
<td>Source Name</td>
<td>Date Issued and State</td>
<td>RBLC ID or IN Permit No.</td>
<td>Emission Unit</td>
<td>BACT Determination</td>
</tr>
<tr>
<td>-------------</td>
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<td>--------------------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>at all times that the manual gluing operation is in operation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(c) Good work practices* shall mean storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.</td>
</tr>
</tbody>
</table>

Greenville Technology, Inc. - Anderson 2016 / IN 095-37334-00136 Plastic parts surface coating line (EU08) (a) The VOC emissions from the plastic parts surface coating line (EU08) shall be controlled by regenerative thermal oxidizer at all times that the surface coating line is in operation. (b) The Permittee shall comply with the following: (1) The VOC capture efficiency for the RTO shall be no less than 100% and the VOC destruction efficiency for the RTO shall be at least 95%; or (2) The VOC capture efficiency for the RTO shall be no less than 100% and the VOC outlet concentration shall not exceed 10 ppmv. (c) The VOC emissions (including after control emissions and uncaptured emissions) from the RTO, which is used to control the emissions from the paint booth, flash off tunnel, and natural gas-fired cure oven of the plastic parts coating line (EU08), shall not exceed 15.126 pounds per hour. |

Greenville Technology, Inc. - Anderson 2012 / IN F095-32281-00136 Plastic parts surface coating line (EU01) (a) The VOC emissions from the paint booth, flash off tunnel, and natural gas-fired cure oven of the plastic parts coating line (EU01) shall be controlled by a combination of a permanent total enclosure and a regenerative thermal oxidizer with an overall control efficiency (including the
<table>
<thead>
<tr>
<th><strong>Source Name</strong></th>
<th><strong>Date Issued and State</strong></th>
<th><strong>RBLC ID or IN Permit No.</strong></th>
<th><strong>Emission Unit</strong></th>
<th><strong>BACT Determination</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyota Motor Manufacturing, Kentucky, Inc.</td>
<td>2016 / KY</td>
<td>KY-0108</td>
<td>Sealer lines E04 and F04</td>
<td>(a) The permittee shall not cause the discharge into the atmosphere of more than 1.15 lbs VOC / vehicle (b) The permittee shall use no more than 26.00 gallons per hour</td>
</tr>
<tr>
<td>Toyota Motor Manufacturing, Kentucky, Inc.</td>
<td>2013 / KY</td>
<td>KY-0102</td>
<td>Sealer &amp; PVC application line</td>
<td>(a) The permittee shall not cause the discharge into the atmosphere of more than 0.8 lbs VOC / vehicle (b) The permittee shall use no more than 7.65 gallons per vehicle</td>
</tr>
<tr>
<td>FCA US LLC, Sterling Heights Assembly Plant</td>
<td>2017 / MI</td>
<td>MI-0428</td>
<td>EU-SEALER BOX (Sealer process)</td>
<td>(a) 0.25 lbs VOC per gallon (minus water), as applied                                                                                                   (a) Total VOC usage shall not exceed 17.3 tpy</td>
</tr>
<tr>
<td>General Motors LLC Lansing Delta Township</td>
<td>2014 / MI</td>
<td>MI-0409 209-00E</td>
<td>EU-SEALERS &amp; ADHESIVES</td>
<td>(b) VOC content shall not exceed 0.3 lbs/gal, less water (c) Total VOC usage shall not exceed 97.0 tpy (d) Total VOC usage shall not exceed 863.1 lb/day</td>
</tr>
<tr>
<td>Subaru of Indiana Automotive, Inc.</td>
<td>2017 / IN</td>
<td>IN-0278 157-37445-00050</td>
<td>Sealer/LASD /PVC Undercoating Line, Unit 014</td>
<td>(a) The VOC emissions from the Sealer, LASD and PVC Undercoating Line, identified as Unit 014 shall be limited to less than 0.38 pounds per gallon (lb/gal), based on a daily volume weighted average.</td>
</tr>
<tr>
<td>Subaru of Indiana Automotive, Inc.</td>
<td>2014 / IN</td>
<td>IN-0195 157-33759-00050</td>
<td>SEALER/LASD / PVC Undercoating Line, Unit 014</td>
<td>(a) The VOC emissions from the Sealer, LASD and PVC Undercoating Line, identified as Unit 014 shall be limited to less than 0.38 pounds per gallon (lb/gal), based on a daily volume weighted average.</td>
</tr>
<tr>
<td>Ford Motor Company Kentucky Truck Plant</td>
<td>2014 / KY</td>
<td>KY-0101</td>
<td>Sealer</td>
<td>(a) The owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 3.0 lb VOC/gal of coating, excluding water and exempt solvents, as applied.</td>
</tr>
<tr>
<td>Source Name</td>
<td>Date Issued and State</td>
<td>RBLC ID or IN Permit No.</td>
<td>Emission Unit</td>
<td>BACT Determination</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>
| Roxul USA, Inc. | 2018 / WV | WV-0030 | Rockfon Glue and Paint Application | (a) The maximum aggregate VOC emissions from the application of glue and coatings in the Rockfon line shall not exceed 35.93 tpy.  
(b) The application of glue and coatings shall use low-VOC materials and utilize good work practices. "Low-VOC materials" shall mean the use of glue is limited to containing a maximum VOC content of 0.57 lb-VOC/gallon-glue and the use of coatings are limited to containing a maximum VOC content of 0.67 lb-VOC/gallon-material.  
(c) "Good work practices" shall mean storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers. |
| Forest River, Inc., Plant #63 | 2014 / IN | M039-34761-00760 | Assembly Operation (EU-01) | (a) Total VOC usage shall not exceed 96.61 tpy  
(b) VOC content 6.5 lb/gal cleaners/solvents  
(c) HVLP spray applications or equivalent  
(d) Best management practices  
1. Sealed lids on containers of VOC not in use or in storage;  
2. Gun and line purging of VOC containing cleaning solvents into approved containers and at the minimum cleaning pressure required to prevent excess atomization;  
3. Organized spill response and immediate cleanup for spills of VOC containing materials; and  
4. Preventative maintenance procedures for application equipment to prevent spills and release of VOC containing materials. |
| Cooper-Standard Automotive, Inc. | 2017 / IN | 033-38025-00013 | Chain-on-Edge system COE No. 9 (applying paints and adhesives using HVLP spray guns and chain indexing) | (a) Operate the following overspray controls:  
1. Programmable Logic Controls (PLC);  
2. Part fixture sensing;  
3. Overspray filters; and  
4. HVLP spray guns.  
(b) Operate chain indexing on COE#9 |
The VOC content of the coatings and adhesives shall not exceed 7.0 lbs/gal, less water.

The VOC input to the applicators of COE #9 minus the VOC disposed of shall not exceed 32.65 tpy.

Roxul USA, Inc. and Forest River, Inc., Plant #63 both use low-VOC coatings as BACT. Low-VOC coatings have previously been determined to be technologically infeasible for Reagent. Therefore, the lower VOC coatings included in comparable BACTs have been eliminated as BACT for Reagent.

Several comparable BACTs (FCA USA, Subaru of Indiana Automotive, Inc., General Motors LLC – Lansing Delta Township, Ford Motor Company – Kentucky Truck Plant) include emissions limitations in pounds of VOC per gallon of coating, or pounds of VOC per vehicle.

The proposed BACT is more stringent compared to the pounds of VOC per gallon coating included for the comparable BACTs, since the after-control VOC emissions for Reagent at the proposed minimum RTO control efficiency are 0.16 pounds per gallon.

Toyota Motor Manufacturing, Kentucky, Inc. does not include a minimum control efficiency for the oxidizer, but uses a catalytic oxidizer with a 25% capture efficiency and 86% control efficiency (overall control efficiency of 21.5%) to comply with its BACT for Sealer Lines E04 and F04, and a thermal oxidizer with an estimated 27% control efficiency to comply with its BACT for the Sealer & PVC application line. The proposed Reagent BACT is more stringent since it requires a minimum of 98% control efficiency.

The proposed BACT (98% control efficiency) is more stringent than the Greenville BACTs which each require a minimum control efficiency of 95%.

The comparable BACT limits in tons per year included in the comparable BACTs are less stringent than the proposed BACT, since the after-control VOC emissions based on the minimum control efficiency required for Reagent are 0.35 ton per year.

Cooper Standard Automotive requires overspray controls but the tons per year and pounds per gallon limits are much less stringent compared to the proposed Reagent BACT, and also does not include the requirement to operate a control device at a minimum control efficiency.

IDEM, OAQ also researched documented regulations for comparable sources, including regulations from under the California South Coast Air Quality Management District. Pursuant to Rule 1168 (Adhesive and Sealant Applications), amended October 6, 2017, a source may comply with the rule by using approved air pollution control equipment to apply a regulated product, provided:

1. The control device reduces VOC emissions from an emission collection system by at least 95 percent by weight or the output of the air pollution control device is no more than 50 ppm VOC by volume calculated as carbon with no dilution; and

2. The owner/operator demonstrates that the emission collection system collects at least 90 percent by weight of the VOC emissions generated by the sources of VOC emissions.

This minimum control efficiency and the VOC concentration at the outlet of the control device required under the California regulation are both less stringent than the proposed BACT.
Energy, Environmental, and Economic Impacts

Reagent is proposing to continue to use an existing regenerative thermal oxidizer with a 98% overall control efficiency as BACT, which is more stringent than other comparable BACTs. Therefore, no cost analysis is necessary.

Proposed BACT:

(a) The VOC emissions from the manual gluing operation (PO12) shall be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation is in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices.

Step 5: Select BACT

Pursuant to 326 IAC 8-1-6 and based on a review of the RBLC database and the evaluation of potential control technologies above, IDEM, OAQ has determined that the following requirements are determined to represent BACT for the manual gluing operation (PO12):

(a) The VOC emissions from the manual gluing operation (PO12) shall be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation is in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices shall be adopted – including storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.

Compliance with the above shall satisfy the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) for the use of the manual gluing operation (PO12).

VOC BACT Analysis - Manual Rubber Lining Operation (PO16)

Step 1 – Identify All Potentially Available Control Options

Based on the information reviewed for this BACT determination, the following potentially available control technologies were identified for controlling VOC emissions from the manual rubber lining operation (PO16):

(a) Housekeeping practices
Implementing good housekeeping practices can reduce VOC losses. Such practices include: sealing lids on all containers, maintaining an organized spill response and clean-up operation, performing routine maintenance on coating equipment and pumps to prevent drips and seal leaks, and using aqueous, and/or exempt solvents where effective and practical.

(b) Inherently lower-polluting coatings – Low VOC/waterborne coatings
Inherently lower-polluting processes or practices include the use of materials, production processes, and work practices that prevent emissions and result in lower "production-specific" emissions. For example, the use of a water-based coating instead of solvent-based coating.
(c) **Regenerative Thermal Oxidizer**

Thermal oxidation is the process of oxidizing organic contaminants in a waste gas stream by raising the temperature above the auto ignition point in the presence of oxygen for sufficient time to completely oxidize the organic contaminants to carbon dioxide and water. The residence time, temperature, flow velocity and mixing, and the oxygen concentration in the combustion chamber affect the oxidation rate and destruction efficiency. Thermal oxidizers typically require combustion of an auxiliary fuel (e.g., natural gas) to maintain combustion chamber temperature high enough to completely oxidize the contaminant gases. Thermal oxidizers are typically designed to have a residence time of one second or less and combustion chamber temperatures between 1,200 and 2,000°F.

A regenerative thermal oxidizer uses a high-density media such as a packed ceramic bed, which was heated in a previous cycle, to preheat the incoming waste gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. Process gases pass through the RTO inlet isolation damper before entering the inlet of the RTO. Upon entering the RTO, the gases pass up through a heat recovery section (pre-heating mode), enter the combustion chamber where the VOCs are destroyed and then pass through another heat recovery section (heat recovery mode), and exit the system via the exhaust duct. A regenerative thermal oxidizer can be configured to have a two pass or three pass system, where the heat regeneration beds are passed by the gases either 2 or 3 times. For this application the theoretical thermal efficiency is increased from 90% for a two-pass system to 95% for a three-pass system. However, the three-pass system initial cost is higher and the required fan energy is also higher.

(d) **Recuperative Thermal Oxidizer**

Thermal recuperative oxidizers have a primary and/or secondary heat exchanger within the system. The difference between a recuperative oxidizer and a regenerative oxidizer is simply where the reclaimed heat is used. Essentially, the regenerative oxidizer puts the heat back into the process of destroying the VOCs, whereas a recuperative oxidizer routes the heat to another process instead (like cogeneration). Recuperative thermal oxidizers can achieve a destruction efficiency of 98%.

(e) **Catalytic Incinerator**

In a catalytic incinerator, a catalyst is used to lower the activation energy for oxidation. When a preheated gas stream is passed through a catalytic oxidizer, the catalyst bed initiates and promotes the oxidation of VOCs without being permanently altered itself. In catalytic incineration, combustion occurs at significantly lower temperatures than that of direct flame units and can achieve a destruction efficiency of 95%. However, steps must be taken to ensure complete combustion. Common types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese, and nickel. These catalysts are typically deposited in thin layers on an inert substrate, usually a honeycomb shaped ceramic. Catalytic incineration is not suited to systems with high exhaust volumes, variable types and concentrations of VOC, and where catalyst poisons or fouling contaminants are present.

(f) **Carbon Adsorption**

Carbon adsorption is a process, by which VOC is retained on a granular carbon surface, which is highly porous and has a very large surface-to-volume ratio. Adsorption is rapid and removes most of the VOC in the stream. Eventually, the adsorbent becomes saturated with the vapors and the system’s efficiency drops. The adsorbent must be regenerated or replaced soon after efficiency begins to decline. In regenerative systems, the adsorbent is reactivated with steam or hot air and the adsorbate (solvent) is recovered for reuse or disposal. Non-regenerative systems require the removal of the adsorbent and replacement with fresh or previously regenerated carbon.

(g) **Bio-filtration**

A Bio-filtration system is a land intensive setup in which contaminated air is fed under an active bed of soil or other substrate containing living microorganisms. As the air rises through the soil,
the microorganisms consume and convert the organic materials in the air stream to carbon dioxide and water.

**Step 2 – Eliminate Technically Infeasible Control Options**

(a) Inherently lower-polluting coatings – Low VOC/waterborne coatings
Due to the hazardous and corrosive environment that the coatings and linings will be subjected to during the transportation of HCl, the Department of Transportation regulates which coatings are used in the preparation and manufacture of transportation equipment of HCl. This means Reagent is not able to change adhesives in an attempt to lower VOC or HAP emissions or raise the solids content. Therefore, this technology is technically infeasible.

(b) Carbon Adsorption
Reagent previously utilized carbon adsorption technology prior to the installation of the regenerative thermal oxidizer in 2015. Reagent replaced the carbon bed adsorbers because they determined that the carbon bed adsorbers were incapable of reaching the necessary control standards when the rubber lining process was operating at maximum capacity.

Based on the information reviewed it has been determined that carbon adsorption is not technically feasible to control the VOC emissions.

(c) Bio-filtration
The operation at Reagent is intended to run only eight (8) hours a day and five (5) days a week. The microorganisms need to be fed contaminated air consistently to keep these bugs alive. Start up and shut down over weekends and at the end of the working day would prohibit the life of the microorganisms. Many times in active soil beds other bacteria begin to thrive and spread disease among the microorganisms intended on converting the chemicals to carbon dioxide and water. For these reasons, biofiltration was eliminated from future consideration.

Based on the information reviewed it has been determined that the use of Biofiltration is not technically feasible to control the VOC emissions.

**Step 3 – Rank Remaining Control Technologies by Control Effectiveness**

IDEM, OAQ has ranked the technically feasible control technologies and combinations of control technologies as follows:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control Technology</th>
<th>Overall Control Efficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regenerative Thermal Oxidizer</td>
<td>98%</td>
</tr>
<tr>
<td>2</td>
<td>Recuperative Thermal Oxidizer</td>
<td>98%</td>
</tr>
<tr>
<td>3</td>
<td>Catalytic Incinerator</td>
<td>98%</td>
</tr>
<tr>
<td>4</td>
<td>Housekeeping Practices</td>
<td>NA*</td>
</tr>
</tbody>
</table>

*VOC reduction would occur but has not been quantified.
A review of EPA’s RACT/BACT/LAER Clearinghouse (RBLC) and Indiana Air Permits identified the following previous BACT determinations for sources that operate under the Process Codes 41.002 (Automobiles and Trucks Surface Coating (OEM)), 41.016 (Plastic Parts & Products Surface Coating (Except 41.015)) and 41.999 (Other Surface Coating/Printing/Graphic Arts Sources), as well as the process name keywords “glue” and “adhesive” in the RBLC. The table below is arranged based on how stringent the BACT determination is. Therefore, the table begins with the most stringent BACT determination, which requires the use of an add-on control device and ends with the least stringent BACT determination.

<table>
<thead>
<tr>
<th>Source Name</th>
<th>Date Issued and State</th>
<th>RBLC ID or IN Permit No.</th>
<th>Emission Unit</th>
<th>BACT Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reagent Chemical &amp; Research, Inc.</td>
<td>Proposed / IN</td>
<td>149-43822-00028</td>
<td>Manual Rubber Lining Operation (PO16)</td>
<td>(d) The VOC emissions from the manual rubber lining operation (PO16) shall be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation is in operation.</td>
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<td>(e) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>(f) Good work practices shall mean storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.</td>
</tr>
<tr>
<td>Greenville Technology, Inc. - Anderson</td>
<td>2016 / IN</td>
<td>095-37334-00136</td>
<td>Plastic parts surface coating line (EU08)</td>
<td>(d) The VOC emissions from the plastic parts surface coating line (EU08) shall be controlled by regenerative thermal oxidizer at all times that the surface coating line is in operation.</td>
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<td>(e) The Permittee shall comply with the following:</td>
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<td>(1) The VOC capture efficiency for the RTO shall be no less than 100% and the VOC destruction efficiency for the RTO shall be at least 95%; or</td>
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<td>(2) The VOC capture efficiency for the RTO shall be no less than 100% and the VOC outlet concentration shall not exceed 10 ppmv.</td>
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<td>(f) The VOC emissions (including after control emissions and uncaptured emissions) from the RTO, which is used to</td>
</tr>
<tr>
<td>Source Name</td>
<td>Date Issued and State</td>
<td>RBLC ID or IN Permit No.</td>
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<tr>
<td>Greenville Technology, Inc. - Anderson</td>
<td>2012 / IN</td>
<td>F095-32281-00136</td>
<td>Plastic parts surface coating line (EU01)</td>
<td>(c) The VOC emissions from the paint booth, flash off tunnel, and natural gas-fired cure oven of the plastic parts coating line (EU08) shall not exceed 15.126 pounds per hour.</td>
</tr>
<tr>
<td>Toyota Motor Manufacturing, Kentucky, Inc.</td>
<td>2016 / KY</td>
<td>KY-0108</td>
<td>Sealer lines E04 and F04</td>
<td>(c) The permittee shall not cause the discharge into the atmosphere of more than 1.15 lbs VOC / vehicle</td>
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<td>(d) The permittee shall use no more than 26.00 gallons per hour</td>
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<tr>
<td>Toyota Motor Manufacturing, Kentucky, Inc.</td>
<td>2013 / KY</td>
<td>KY-0102</td>
<td>Sealer &amp; PVC application line</td>
<td>(c) The permittee shall not cause the discharge into the atmosphere of more than 0.8 lbs VOC / vehicle</td>
</tr>
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<td></td>
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<td>(d) The permittee shall use no more than 7.65 gallons per vehicle</td>
</tr>
<tr>
<td>FCA US LLC, Sterling Heights Assembly Plant</td>
<td>2017 / MI</td>
<td>MI-0428</td>
<td>EU-SEALER BOX (Sealer process)</td>
<td>(b) 0.25 lbs VOC per gallon (minus water), as applied</td>
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<td>(e) Total VOC usage shall not exceed 17.3 tpy</td>
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<tr>
<td>General Motors LLC Lansing Delta Township</td>
<td>2014 / MI</td>
<td>MI-0409 209-00E</td>
<td>EU-SEALERS &amp; ADHESIVES</td>
<td>(f) VOC content shall not exceed 0.3 lbs/gal, less water</td>
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<td>(g) Total VOC usage shall not exceed 97.0 tpy</td>
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<td>(h) Total VOC usage shall not exceed 863.1 lb/day</td>
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<tr>
<td>Subaru of Indiana Automotive, Inc.</td>
<td>2017 / IN</td>
<td>IN-0278 157-37445-00050</td>
<td>Sealer/LASD /PVC Undercoating Line, Unit 014</td>
<td>(b) The VOC emissions from the Sealer, LASD and PVC Undercoating Line, identified as Unit 014 shall be limited to less than 0.38 pounds per gallon (lb/gal), based on a daily volume weighted average.</td>
</tr>
<tr>
<td>Source Name</td>
<td>Date Issued and State</td>
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</tr>
<tr>
<td>Subaru of Indiana Automotive, Inc.</td>
<td>2014 / IN</td>
<td>IN-0195 157-33759-00050</td>
<td>SEALER/LASD / PVC Undercoating Line, Unit 014</td>
<td>(b) The VOC emissions from the Sealer, LASD and PVC Undercoating Line, identified as Unit 014 shall be limited to less than 0.38 pounds per gallon (lb/gal), based on a daily volume weighted average.</td>
</tr>
<tr>
<td>Ford Motor Company Kentucky Truck Plant</td>
<td>2014 / KY</td>
<td>KY-0101</td>
<td>Sealer</td>
<td>(b) The owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 3.0 lb VOC/gal of coating, excluding water and exempt solvents, as applied.</td>
</tr>
</tbody>
</table>
| Roxul USA, Inc.                                  | 2018 / WV             | WV-0030                  | Rockfon Glue and Paint Application     | (d) The maximum aggregate VOC emissions from the application of glue and coatings in the Rockfon line shall not exceed 35.93 tpy.  
(e) The application of glue and coatings shall use low-VOC materials and utilize good work practices. "Low-VOC materials" shall mean the use of glue is limited to containing a maximum VOC content of 0.57 lb-VOC/gallon-glue and the use of coatings are limited to containing a maximum VOC content of 0.67 lb-VOC/gallon-material.  
(f) "Good work practices" shall mean storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers. |
<table>
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</tr>
</thead>
</table>
| Forest River, Inc., Plant #63       | 2014 / IN             | M039-34761-00760         | Assembly Operation (EU-01)        | (e) Total VOC usage shall not exceed 96.61 tpy  
|                                     |                       |                          |                                   | (f) VOC content 6.5 lb/gal cleaners/solvents  
|                                     |                       |                          |                                   | (g) HVLP spray applications or equivalent  
|                                     |                       |                          |                                   | (h) Best management practices  
|                                     |                       |                          |                                   | (1) Sealed lids on containers of VOC not in use or in storage;  
|                                     |                       |                          |                                   | (2) Gun and line purging of VOC containing cleaning solvents into approved containers and at the minimum cleaning pressure required to prevent excess atomization;  
|                                     |                       |                          |                                   | (3) Organized spill response and immediate cleanup for spills of VOC containing materials; and  
|                                     |                       |                          |                                   | (4) Preventative maintenance procedures for application equipment to prevent spills and release of VOC containing materials.                                                                                       |
| Cooper-Standard Automotive, Inc.    | 2017 / IN             | 033-38025-00013          | Chain-on-Edge system COE No. 9 (applying paints and adhesives using HVLP spray guns and chain indexing) | (e) Operate the following overspray controls:  
|                                     |                       |                          |                                   | (1) Programmable Logic Controls (PLC);  
|                                     |                       |                          |                                   | (2) Part fixture sensing;  
|                                     |                       |                          |                                   | (3) Overspray filters; and  
|                                     |                       |                          |                                   | (4) HVLP spray guns.  
|                                     |                       |                          |                                   | (f) Operate chain indexing on COE#9  
|                                     |                       |                          |                                   | (g) VOC content of the coatings and adhesives shall not exceed 7.0 lbs/gal, less water  
|                                     |                       |                          |                                   | (h) The VOC input to the applicators of COE #9 minus the VOC disposed of shall not exceed 32.65 tpy.                                                                                                             |

Roxul USA, Inc. and Forest River, Inc., Plant #63 both use low-VOC coatings as BACT. Low-VOC coatings have previously been determined to be technologically infeasible for Reagent. Therefore, the lower VOC coatings included in comparable BACTs have been eliminated as BACT for Reagent.

Several comparable BACTs (FCA USA, Subaru of Indiana Automotive, Inc., General Motors LLC – Lansing Delta Township, Ford Motor Company – Kentucky Truck Plant) include emissions limitations in pounds of VOC per gallon of coating, or pounds of VOC per vehicle.

The proposed BACT is more stringent compared to the pounds of VOC per gallon coating included for the comparable BACTs, since the after-control VOC emissions for Reagent at the proposed minimum RTO control efficiency are 0.16 pounds per gallon.
Toyota Motor Manufacturing, Kentucky, Inc. does not include a minimum control efficiency for the oxidizer, but uses a catalytic oxidizer with a 25% capture efficiency and 86% control efficiency (overall control efficiency of 21.5%) to comply with its BACT for Sealer Lines E04 and F04, and a thermal oxidizer with an estimated 27% control efficiency to comply with its BACT for the Sealer & PVC application line. The proposed Reagent BACT is more stringent since it requires a minimum of 98% control efficiency.

The proposed BACT (98% control efficiency) is more stringent than the Greenville BACTs which each require a minimum control efficiency of 95%.

The comparable BACT limits in tons per year included in the comparable BACTs are less stringent than the proposed BACT, since the after-control VOC emissions based on the minimum control efficiency required for Reagent are 0.35 ton per year.

Cooper Standard Automotive requires overspray controls but the tons per year and pounds per gallon limits are much less stringent compared to the proposed Reagent BACT, and also does not include the requirement to operate a control device at a minimum control efficiency.

IDEM, OAQ also researched documented regulations for comparable sources, including regulations from under the California South Coast Air Quality Management District. Pursuant to Rule 1168 (Adhesive and Sealant Applications), amended October 6, 2017, a source may comply with the rule by using approved air pollution control equipment to apply a regulated product, provided:

1. The control device reduces VOC emissions from an emission collection system by at least 95 percent by weight or the output of the air pollution control device is no more than 50 ppm VOC by volume calculated as carbon with no dilution; and

2. The owner/operator demonstrates that the emission collection system collects at least 90 percent by weight of the VOC emissions generated by the sources of VOC emissions.

This minimum control efficiency and the VOC concentration at the outlet of the control device required under the California regulation are both less stringent than the proposed BACT.

**Energy, Environmental, and Economic Impacts**

Reagent is proposing to continue to use an existing regenerative thermal oxidizer with a 98% overall control efficiency as BACT, which is more stringent than other comparable BACTs. Therefore, no cost analysis is necessary.

**Proposed BACT:**

(a) The VOC emissions from the manual rubber lining operation (PO16) shall be controlled by a regenerative thermal oxidizer at all times that the manual gluing operation is in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices.

**Step 5: Select BACT**

Pursuant to 326 IAC 8-1-6 and based on a review of the RBLC database and the evaluation of potential control technologies above, IDEM, OAQ has determined that the following requirements are determined to represent BACT for the manual rubber lining operation (PO16):
(a) The VOC emissions from the manual rubber lining operation (PO16) shall be controlled by a regenerative thermal oxidizer at all times that the manual rubber lining operation is in operation.

(b) The overall VOC control efficiency for the regenerative thermal oxidizer (including the capture efficiency and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv at 100% capture efficiency.

(c) Good work practices shall be adopted – including storing VOC-containing materials in closed tanks or containers, cleaning up spills, and minimizing cleaning with VOC-containing containers.

Compliance with the above shall satisfy the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) for the use of the manual rubber lining operation (PO16).
June 7, 2021

John Thomas
Reagent Chemical & Research, Inc.
1705 W Pacific Ave
Knox, IN 46534

Re: Public Notice
Reagent Chemical & Research, Inc.
Permit Level: Title V Sig Source Mod Minor PSD
Title V Sig Permit Mod
Permit Number: 149-43822-00028
149-43947-00028

Dear Mr. Thomas:

Enclosed is the Notice of 30-Day Period for Public Comment for your draft air permit.

Our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person. The Notice of 30-Day Period for Public Comment has also been sent to the OAQ Permits Branch Interested Parties List and, if applicable, your Consultant/Agent and/or Responsible Official/Authorized Individual.

The preliminary findings, including the draft permit, technical support document, emission calculations, and other supporting documents, are available electronically at:

IDEM’s online searchable database: http://www.in.gov/apps/idem/caats/ . Choose Search Option by Permit Number, then enter permit 43822 or 43947

and

IDEM’s Virtual File Cabinet (VFC): https://www.IN.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/public-notices/

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Starke County Public Library System – Schricker Main Library, 152 West Culver Road in Knox, IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.
Please review the draft permit documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Natalie Moore, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-8279 or dial (317) 233-8279.

Sincerely,

Theresa Weaver

Theresa Weaver
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter access via website 8/10/2020
June 7, 2021

To: Starke County Public Library System – Schricker Main Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Reagent Chemical & Research, Inc.
Permit Number: 149-43822-00028 & 149-43947-00028

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019
Notice of Public Comment

June 7, 2021
Reagent Chemical & Research, Inc.
149-43822-00028 & 149-43947-00028

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/public-notices/.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at JBRUSH@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.

Enclosure
PN AAA Cover Letter 2/28/2020
AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

June 7, 2021

A 30-day public comment period has been initiated for:

Permit Number:  149-43822-00028 & 149-43947-00028
Applicant Name:  Reagent Chemical & Research, Inc.
Location:  Knox, Starke County, Indiana

The public notice, draft permit and technical support documents can be accessed via the IDEM Air Permits Online site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

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

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Affected States Notification  1/9/2017
**IDEM Staff**
**TAWEAVER 6/7/2021**
**Reagent Chemical & Research Inc 149-43822-00099 (draft)**

**Name and address of Sender**
Indiana Department of Environmental Management  
Office of Air Quality – Permits Branch  
100 N. Senate  
Indianapolis, IN 46204

**Type of Mail:**
CERTIFICATE OF MAILING ONLY

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<td>Christina Seiler The Rochester Sentinel PO Box 260 Rochester IN 46975 (Affected Party)</td>
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