

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Michael R. Pence Governor Thomas W. Easterly Commissioner

To:	Interested Parties
Date:	September 26, 2014
From:	Matthew Stuckey, Chief Permits Branch Office of Air Quality
Source Name:	Blue Grass Chemical Specialties, LLC
Permit Level:	FESOP
Permit Number:	043-34680-00033
Source Location:	895 Industrial Blvd., New Albany, Indiana
Type of Action Taken:	Permit Renewal

# Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: <u>http://www.in.gov/apps/idem/caats/</u> To view the document, select Search option 3, then enter permit 34680.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201 100 North Senate Avenue, MC 50-07 Indianapolis, IN 46204 Phone: 1-800-451-6027 (ext. 4-0965) Fax (317) 232-8659

Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

(continues on next page)



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

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

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

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

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

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Governor

Thomas W. Easterly Commissioner

# Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

# Blue Grass Chemical Specialties, L.L.C. 895 Industrial Blvd. New Albany, Indiana 47150

(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. 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 2-8 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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

Operation Permit No.: F043-34680-00033

Issued by:

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

Issuance Date: September 26, 2014 Expiration Date:

September 26, 2024



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#### SECTION A

#### SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.4 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 2-8-3(b)]

Source Address:	895 Industrial Blvd., New Albany, Indiana 47150
General Source Phone Number:	(812) 948-1115
SIC Code:	2899
County Location:	Floyd
Source Location Status:	Nonattainment for PM <sub>2.5</sub> standard
	Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program
	Minor Source, under PSD and Emission Offset Rules
	Minor Source, Section 112 of the Clean Air Act
	1 of 28 Source Categories
	-

The Permittee owns and operates a stationary metal nitration plant producing metal nitrates.

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)] This stationary source consists of the following emission units and pollution control devices:

- (a) One Campaign Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 52 and Tank 53, and scrubber identified Tank 56, exhausting to stack ST-12, with a maximum throughput rate ranging from 173 lbs/hr to 5800 lbs/hr depending on what is being processed (manganese, magnesium, aluminum, zinc, or bismuth) and consisting of the following:
  - (1) One (1) Nitric Acid Dissolving Tank, identified as Tank 17, constructed in 2008, with a maximum capacity of 3,600 gallons.
  - (2) One (1) Nitric Acid Dissolving Tank, identified as Tank 19, constructed in 1997, with a maximum capacity of 2,200 gallons, capable of precipitating ferric hydroxide at a process throughput rate of 275 lbs/hr.
  - (3) One (1) Nitric Acid Dissolving Tank, identified as Tank 45, constructed in 1990, with a maximum capacity of 4,000 gallons.
  - (4) One (1) Nitric Acid Dissolving Tank, identified as Tank 50, constructed in 2001, with a maximum capacity of 6,000 gallons.
  - (5) One (1) Nitric Acid Dissolving Tank, identified as Tank 54, constructed in 1986, with a maximum capacity of 750 gallons.
  - (6) One (1) Nitric Acid Dissolving Tank, identified as Tank 55, constructed in 2000, with a maximum capacity of 4,500 gallons.
- (b) One Ferric Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 63 and Tank 64, and scrubbers identified as Tank 30, Tank 65, and Tank 68, exhausting to stack ST-12, and consisting of the

following:

- (1) One (1) Ferric Nitrate Tank, identified as Tank 58, constructed in 1986, with a maximum capacity of 4,500 gallons and a maximum process throughput rate of 500 lbs/hr.
- (2) One (1) Ferric Nitrate Tank, identified as Tank 59, constructed in 1988, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
- (3) One (1) Ferric Nitrate Tank, identified as Tank 60, constructed in 1992, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
- (4) One (1) Ferric Nitrate Tank, identified as Tank 61, constructed in 2002, with a maximum capacity of 4,500 gallons and a maximum process throughput rate of 500 lbs/hr.
- (5) One (1) Ferric Nitrate Tank, identified as Tank 62, constructed in 1992, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
- (c) One Copper Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 39 and Tank 40, and scrubber identified as Tank 38, exhausting to stack ST-12, and consisting of the following:
  - (1) One (1) Copper Nitrate Tank, identified as Tank 42, constructed in 1988, with a maximum capacity of 2,800 gallons and a maximum process throughput rate of 357 lbs/hr.
  - (2) One (1) Copper Nitrate Tank, identified as Tank 43, constructed in 1986, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 357 lbs/hr.
  - Note: Stack S-12 is the common exhaust stack for the emissions from the Campaign, Ferric, and Copper Nitrate Reaction Processes.
- (d) Miscellaneous storage and holding tanks, including:
  - (1) One (1) Ferric Hydroxide Slurry Dispersion Tank, identified as Tank-14, constructed in 1989, with a maximum capacity of 1200 gallons.
  - (2) One (1) Copper Carbonate Slurry Tank, identified as Tank-20, constructed in 1989, with a maximum capacity of 1800 gallons.
  - (3) One (1) 30% Sodium Hydroxide Storage Tank, identified as Tank-23, constructed prior to 1978, with a maximum capacity of 7000 gallons.
  - (4) One (1) 35 % Hydrogen Peroxide Storage Tank, identified as Tank-26, constructed in 2006, with a maximum capacity of 6000 gallons.
  - (5) One (1) Regenerated Nitric Acid Storage Tank, identified as Tank-27, constructed in 2006, with a maximum capacity of 4000 gallons.
  - (6) One (1) Nitric Acid Storage Tank, identified as Tank-28, constructed in 1985, with a maximum capacity of 6000 gallons.

- (7) One (1) Ferric Nitrate Storage Tank, identified as Tank-33, constructed in 1997, with a maximum capacity of 6000 gallons.
- (8) One (1) Nitric Acid Storage Tank, identified as Tank-34, constructed in 2000, with a maximum capacity of 6000 gallons.
- (9) One (1) Ferric Nitrate Storage Tank, identified as Tank-37, constructed in 1988, with a maximum capacity of 4300 gallons.
- (10) One Copper Nitrate Feed Tank, identified as Tank-41, constructed in 1997, with a maximum capacity of 4000 gallons.
- (11) Four (4) Finished Metal Salt Storage Tanks, identified as Tank-46 through Tank-49, constructed in 1996, each with a capacity of 4300 gallons.
- (e) Four (4) Filter Presses, identified as FP-1 through FP-4, with FP-1, FP-3, and FP-4 being constructed in 1985, and FP-2 being constructed in 2003, each with a maximum capacity of 72 lbs/hr.
- (f) One (1) Auger Feed Tray Loading Station, identified as Tank 13, constructed in 2004, with a maximum capacity of 200 gallons.
- (g) One (1) Tray Dump Station, identified as US-1, constructed in 2004, with maximum capacity of 3,600 lbs/hr.
- (h) One (1) Tray Dump Station, identified as US-2, constructed in 2004, with a maximum capacity of 3,600 lbs/hr.
- (i) One (1) Cone Mill, identified as COMIL, constructed in 2008, with a maximum capacity of 3,600 lbs/hr, used in the de-lumping of solid product being dried in the Grieve Oven.

Process	Tanl	k IDs	Control Devices	Stacks
Campaign Nitrate Reaction Process	Tank 17 Tank 19 Tank 45	Tank 50 Tank 54 Tank 55	Tank 52 Tank 53 Tank 56 (3 scrubbers in series)	
Ferric Nitrate Reaction Process	Tank 58 Tank 59 Tank 60 Tank 61 Tank 62		Tank 30 Tank 63 Tank 64 Tank 65 Tank 68 (5 scrubbers in unison)	Stack ST-12
Copper Nitrate Reaction Process	Tank 42 Tank 43		Tank 38 Tank 39 Tank 40 (3 scrubbers in series)	
Misc Tanks	Tank 14 Tank 20 Tank 23 Tank 26 Tank 27 Tank 28 Tank 33	Tank 34 Tank 37 Tank 41 Tank 46 Tank 47 Tank 48 Tank 49	None	None

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including:
  - (1) One (1) 100 Hp Boiler, identified as B-1, constructed in 1989, with a maximum capacity of 4.2 MMBtu/hr, exhausting to stack ST-10.
  - (2) Two (2) Office Furnaces, identified as OF-1 and OF-2, constructed in 1985 and 1992, each with a maximum capacity of 0.092 MMBtu/hr, exhausting to stacks ST-4 and ST-5 respectively.
  - (3) Two (2) Plant Furnaces, identified as PF-1 and PF-2, constructed in 1993 and 1997, with maximum capacities of 0.16 MMBtu/hr and 0.32 MMBtu/hr, exhausting to stacks ST-6 and ST-7 respectively.
  - (4) One (1) Hot Oil Heater, identified as HOH-1, constructed in 1984, with a maximum capacity of 0.519 MMBtu/hr, exhausting to stack ST-11.
  - (5) One (1) Drying Oven, identified as PQO, constructed in 2004, with a maximum capacity of 0.30 MMBtu/hr, exhausting to stack ST-8.
  - (6) One (1) Drying Oven, identified as GO, constructed in 2007, with a maximum capacity of 0.35 MMBtu/hr, exhausting to stack ST-9.
  - (7) One (1) Hot Water Heater, identified as HWH, constructed in 2004, with a maximum capacity of 0.07 MMBtu/hr, exhausting to stack ST-2.
- (b) Combustion Source flame safety purging on startup.
- (c) Vessels storing the following:
  - (1) Hydraulic oils
  - (2) Lubricating oils
- (d) Equipment used exclusively for the filling drums, pails or other packaging containers with lubricating oils.
- (e) Application of the following as temporary protective coatings:
  - (1) Greases
  - (2) Lubricants
- (f) Welding equipment related to manufacturing activities not resulting tin the emission of HAPs.
- (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (i) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (j) Blowdown for boiler B-1.

- (k) Emissions from a laboratory as defined in 326 IAC 2-7-1(21)(D).
- (I) Emissions from research and development activities as defined in 326 IAC 2-7-1(21)(F).
- (m) Space heaters using propane with heat input equal to or less than six million (6,000,000) British thermal units per hour, including two (2) propane space heaters, each with a capacity of 0.035 million British thermal units per hour.
- (n) One (1) water storage tank, with a capacity of 12,000 gallons.
- (o) Centrifuge dewatering process for copper-based precipitated product.

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

#### SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]
  - (a) This permit, F043-34680-00033, is issued for a fixed term of ten (10) 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, 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 2-8-6] [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 2-8-4(4)]

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 2-8-4(5)(D)] This permit does not convey any property rights of any sort or any exclusive privilege.
- B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).
- B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
  - (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

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

- (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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.12 Emergency Provisions [326 IAC 2-8-12]

- (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 except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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 Southwest Regional Office or Southeast Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch) Facsimile Number: 317-233-6865 Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304 Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) 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.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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

- (a) All terms and conditions of permits established prior to F043-34680-00033 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

#### B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

# B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]
- B.16 Permit Renewal [326 IAC 2-8-3(h)]
  - (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 2-8-3. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.
- B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]
  - (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]
  - (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (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 approval required by 326 IAC 2-8-11.1 has been obtained;
    - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
    - (4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). 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 2-8-15(b)(1) and (c).

- (b) Emission Trades [326 IAC 2-8-15(b)] 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 2-8-15(b).
- Alternative Operating Scenarios [326 IAC 2-8-15(c)]
   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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) 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.19
   Source Modification Requirement [326 IAC 2-8-11.1]

   A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

# B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1] 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:

- Enter upon the Permittee's premises where a FESOP 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]
  - (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
  - (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
  - (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

#### B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

#### **SECTION C**

#### SOURCE OPERATION CONDITIONS

Entire Source

#### Emission Limitations and Standards [326 IAC 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
  - (4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of  $CO_2$  equivalent emissions ( $CO_2e$ ) per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.
- C.3 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.4 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.5Incineration [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.<br/>The Permittee shall not operate a refuse incinerator or refuse burning equipment except as<br/>provided in 326 IAC 9-1-2 or in this permit.
- C.6 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).

#### C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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.

#### Testing Requirements [326 IAC 2-8-4(3)]

- C.8 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:

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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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.9 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 2-8-4][326 IAC 2-8-5(a)(1)]

- C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

#### C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]
  - (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 FESOP.

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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

#### **Stratospheric Ozone Protection**

C.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 Campaign Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 52 and Tank 53, and scrubber identified Tank 56, exhausting to stack ST-12, with a maximum throughput rate ranging from 173 lbs/hr to 5800 lbs/hr depending on what is being processed (manganese, magnesium, aluminum, zinc, or bismuth) and consisting of the following:
  - (1) One (1) Nitric Acid Dissolving Tank, identified as Tank 17, constructed in 2008, with a maximum capacity of 3,600 gallons.
  - (2) One (1) Nitric Acid Dissolving Tank, identified as Tank 19, constructed in 1997, with a maximum capacity of 2,200 gallons, capable of precipitating ferric hydroxide at a process throughput rate of 275 lbs/hr.
  - (3) One (1) Nitric Acid Dissolving Tank, identified as Tank 45, constructed in 1990, with a maximum capacity of 4,000 gallons.
  - (4) One (1) Nitric Acid Dissolving Tank, identified as Tank 50, constructed in 2001, with a maximum capacity of 6,000 gallons.
  - (5) One (1) Nitric Acid Dissolving Tank, identified as Tank 54, constructed in 1986, with a maximum capacity of 750 gallons.
  - (6) One (1) Nitric Acid Dissolving Tank, identified as Tank 55, constructed in 2000, with a maximum capacity of 4,500 gallons.
- (b) One Ferric Nitrate Reaction Process, with NOx emissions controlled by a series of reagent prescrubbers identified as Tank 63 and Tank 64, and scrubbers identified as Tank 30, Tank 65, and Tank 68, exhausting to stack ST-12, and consisting of the following:
  - (1) One (1) Ferric Nitrate Tank, identified as Tank 58, constructed in 1986, with a maximum capacity of 4,500 gallons and a maximum process throughput rate of 500 lbs/hr.
  - (2) One (1) Ferric Nitrate Tank, identified as Tank 59, constructed in 1988, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
  - (3) One (1) Ferric Nitrate Tank, identified as Tank 60, constructed in 1992, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
  - (4) One (1) Ferric Nitrate Tank, identified as Tank 61, constructed in 2002, with a maximum capacity of 4,500 gallons and a maximum process throughput rate of 500 lbs/hr.
  - (5) One (1) Ferric Nitrate Tank, identified as Tank 62, constructed in 1992, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.

(c)	One Copper Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 39 and Tank 40, and scrubber identified as Tank 38, exhausting to stack ST-12, and consisting of the following:	
	(1)	One (1) Copper Nitrate Tank, identified as Tank 42, constructed in 1988, with a maximum capacity of 2,800 gallons and a maximum process throughput rate of 357 lbs/hr.
	(2)	One (1) Copper Nitrate Tank, identified as Tank 43, constructed in 1986, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 357 lbs/hr.
	Note:	Stack S-12 is the common exhaust stack for the emissions from the Campaign, Ferric, and Copper Nitrate Reaction Processes.
(d)	Miscell	aneous storage and holding tanks, including:
	(1)	One (1) Ferric Hydroxide Slurry Dispersion Tank, identified as Tank-14, constructed in 1989, with a maximum capacity of 1200 gallons.
	(2)	One (1) Copper Carbonate Slurry Tank, identified as Tank-20, constructed in 1989, with a maximum capacity of 1800 gallons.
	(3)	One (1) 30% Sodium Hydroxide Storage Tank, identified as Tank-23, constructed prior to 1978, with a maximum capacity of 7000 gallons.
	(4)	One (1) 35 % Hydrogen Peroxide Storage Tank, identified as Tank-26, constructed in 2006, with a maximum capacity of 6000 gallons.
	(5)	One (1) Regenerated Nitric Acid Storage Tank, identified as Tank-27, constructed in 2006, with a maximum capacity of 4000 gallons.
	(6)	One (1) Nitric Acid Storage Tank, identified as Tank-28, constructed in 1985, with a maximum capacity of 6000 gallons.
	(7)	One (1) Ferric Nitrate Storage Tank, identified as Tank-33, constructed in 1997, with a maximum capacity of 6000 gallons.
	(8)	One (1) Nitric Acid Storage Tank, identified as Tank-34, constructed in 2000, with a maximum capacity of 6000 gallons.
	(9)	One (1) Ferric Nitrate Storage Tank, identified as Tank-37, constructed in 1988, with a maximum capacity of 4300 gallons.
	(10)	One Copper Nitrate Feed Tank, identified as Tank-41, constructed in 1997, with a maximum capacity of 4000 gallons.
	(11)	Four (4) Finished Metal Salt Storage Tanks, identified as Tank-46 through Tank-49, constructed in 1996, each with a capacity of 4300 gallons.
(e)		Filter Presses, identified as FP-1 through FP-4, with FP-1, FP-3, and FP-4 being icted in 1985, and FP-2 being constructed in 2003, each with a maximum capacity of 72

- (f) One (1) Auger Feed Tray Loading Station, identified as Tank 13, constructed in 2004, with a maximum capacity of 200 gallons.
- (g) One (1) Tray Dump Station, identified as US-1, constructed in 2004, with maximum capacity of 3,600 lbs/hr.
- (h) One (1) Tray Dump Station, identified as US-2, constructed in 2004, with a maximum capacity of 3,600 lbs/hr.
- (i) One (1) Cone Mill, identified as COMIL, constructed in 2008, with a maximum capacity of 3,600 lbs/hr, used in the delumping of solid product being dried in the Grieve Oven.

(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 2-8-4(1)]

D.1.1 FESOP and PSD Minor Limits [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4 and 326 IAC 2-2, the Permittee shall comply with the following:

The NOx emissions from stack ST-12 shall not exceed 21.77 pounds per hour.

Compliance with this limit, combined with the potential to emit NOx from all other emission units at this source, shall limit the source-wide total potential to emit of NOx to less than 100 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), 326 IAC 2-7 (Part 70 Permits), and 326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties) not applicable to the entire source.

#### **Compliance Determination Requirements**

D.1.2 Scrubber Operation

In order to demonstrate compliance with Condition D.1.1, the scrubbers identified as Tank 30, Tank 38, Tank 39, Tank 40, Tank 52, Tank 53, Tank 56, Tank 63, Tank 64, Tank 65, and Tank 68 shall be operated to maintain compliance with the NOx emission limit.

D.1.3 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform NOx testing for the stack ST-12 exhaust when operating the Campaign Nitrate, Ferric Nitrate, and Copper Nitrate processes, no later than October 2015, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

#### Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

- D.1.4 Wet Scrubber Parametric Monitoring
  - (a) The Permittee shall monitor and record the pressure drops and flow rates of the scrubbers (Tank 30, Tank 38, Tank 39, Tank 40, Tank 52, Tank 53, Tank 56, Tank 63, Tank 64, Tank 65, and Tank 68) at least once per day when the processes are in operation
    - (1) When for any one reading, the pressure drop across any of the scrubbers is outside the normal range of 0.1 and 5.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps.

Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit.

- (2) When for any one reading, the flow rate of any of the scrubbers is less than the normal minimum of 20 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A flow rate that is below the above mentioned minimum is not a deviation from this permit.
- (b) The Permittee shall monitor and record the hydrogen peroxide concentration of the sumps feeding the scrubbers (located below tanks: Tank 38, Tank 56, Tank 30, Tank 65, and Tank 68) at least once per day when the processes are in operation. When for any one reading, the hydrogen peroxide concentration from any of the scrubbers is outside the normal range of 0.25 and 1.50 percent hydrogen peroxide, or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A hydrogen peroxide concentration that is below the mentioned minimum is not a deviation from this permit.

Failure to take response steps shall be considered a deviation from this permit.

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

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### D.1.5 Record Keeping Requirement

- (a) To document the compliance status with Condition D.1.4(a)(1), the Permittee shall maintain records of the pressure drop readings of the scrubbers (Tank 30, Tank 38, Tank 39, Tank 40, Tank 52, Tank 53, Tank 56, Tank 63, Tank 64, Tank 65, and Tank 68). The Permittee shall include in its daily record when a flow rate reading or pressure drop reading is not taken and the reason for the lack of flow rate reading or pressure drop reading (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.4(a)(2), the Permittee shall maintain records of the flow rates of the scrubbers (Tank 30, Tank 38, Tank 39, Tank 40, Tank 52, Tank 53, Tank 56, Tank 63, Tank 64, Tank 65, and Tank 68). The Permittee shall include in its daily record when a flow rate reading is not taken and the reason for the lack of flow rate reading (e.g. the process did not operate that day).
- (c) To document the compliance status with Condition D.1.4(b), the Permittee shall maintain records of the hydrogen peroxide concentrations of the sumps feeding the scrubbers (located below tanks: Tank 38, Tank 56, Tank 30, Tank 65, and Tank 68). The Permittee shall include in its daily record when a flow rate reading is not taken and the reason for the lack of flow rate reading (e.g. the process did not operate that day).
- (d) 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:**

Insignificant Activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including:
  - (1) One (1) 100 Hp Boiler, identified as B-1, constructed in 1989, with a maximum capacity of 4.2 MMBtu/hr, exhausting to stack ST-10.
  - (2) Two (2) Office Furnaces, identified as OF-1 and OF-2, constructed in 1985 and 1992, each with a maximum capacity of 0.092 MMBtu/hr, exhausting to stacks ST-4 and ST-5 respectively.
  - (3) Two (2) Plant Furnaces, identified as PF-1 and PF-2, constructed in 1993 and 1997, with maximum capacities of 0.16 MMBtu/hr and 0.32 MMBtu/hr, exhausting to stacks ST-6 and ST-7 respectively.
  - (4) One (1) Hot Oil Heater, identified as HOH-1, constructed in 1984, with a maximum capacity of 0.519 MMBtu/hr, exhausting to stack ST-11.
  - (5) One (1) Drying Oven, identified as PQO, constructed in 2004, with a maximum capacity of 0.30 MMBtu/hr, exhausting to stack ST-8.
  - (6) One (1) Drying Oven, identified as GO, constructed in 2007, with a maximum capacity of 0.35 MMBtu/hr, exhausting to stack ST-9.
  - (7) One (1) Hot Water Heater, identified as HWH, constructed in 2004, with a maximum capacity of 0.07 MMBtu/hr, exhausting to stack ST-2.

(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 2-8-4(1)]

D.2.1 Particulate Limitations [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission Limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the boiler B-1 shall not exceed 0.6 pounds per million Btu heat input (Ib/MMBtu).

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

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name:Blue Grass Chemical Specialties, L.L.C.Source Address:895 Industrial Blvd., New Albany, Indiana 47150FESOP Permit No.:F043-34680-00033

5

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:

Date:

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 Phone: (317) 233-0178 Fax: (317) 233-6865

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name:	Blue Grass Chemical Specialties, L.L.C.
Source Address:	895 Industrial Blvd., New Albany, Indiana 47150
FESOP Permit No.:	F043-34680-00033

#### This form consists of 2 pages

Page 1 of 2

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

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) 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	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y Describe:	Ν
Type of Pollutants Emitted: TSP, PM-10, $SO_2$ , VOC, $NO_X$ , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are imminent injury to persons, severe damage to equipment, substantial loss of ca of product or raw materials of substantial economic value:	

Form Completed by:\_\_\_\_\_

Title / Position:\_\_\_\_\_

Date:\_\_\_\_\_

Phone: \_\_\_\_\_

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:	Blue Grass Chemical Specialties, L.L.C.
Source Address:	895 Industrial Blvd., New Albany, Indiana 47150
FESOP Permit No.:	F043-34680-00033

Months: \_\_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

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

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

**Duration of Deviation:** 

Number of Deviations:

**Probable Cause of Deviation:** 

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Number of Deviations:

Probable Cause of Deviation:

**Response Steps Taken:** 

Page 2 of 2

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

Form Completed by:\_\_\_\_\_

Title / Position:\_\_\_\_\_

Date:\_\_\_\_\_

Phone: \_\_\_\_\_

# Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit Renewal

#### Source Background and Description

Source Name: Source Location: County: SIC Code: Permit Renewal No.: Permit Reviewer: Blue Grass Chemical Specialties, L.L.C. 895 Industrial Blvd., New Albany, IN 47150 Floyd 2899 F043-34680-00033 Julie Mendez

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Blue Grass Chemical Specialties, L.L.C. relating to the operation of a stationary metal nitration plant producing metal nitrates. On June 27, 2014, Blue Grass Chemical Specialties, L.L.C. submitted an application to the OAQ requesting to renew its operating permit. Blue Grass Chemical Specialties, L.L.C. was issued a FESOP (F0433-28562-00033) on March 30, 2010.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One Campaign Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 52 and Tank 53, and scrubber identified Tank 56, exhausting to stack ST-12, with a maximum throughput rate ranging from 173 lbs/hr to 5800 lbs/hr depending on what is being processed (manganese, magnesium, aluminum, zinc, or bismuth) and consisting of the following:
  - (1) One (1) Nitric Acid Dissolving Tank, identified as Tank 17, constructed in 2008, with a maximum capacity of 3,600 gallons.
  - (2) One (1) Nitric Acid Dissolving Tank, identified as Tank 19, constructed in 1997, with a maximum capacity of 2,200 gallons, capable of precipitating ferric hydroxide at a process throughput rate of 275 lbs/hr.
  - (3) One (1) Nitric Acid Dissolving Tank, identified as Tank 45, constructed in 1990, with a maximum capacity of 4,000 gallons.
  - (4) One (1) Nitric Acid Dissolving Tank, identified as Tank 50, constructed in 2001, with a maximum capacity of 6,000 gallons.
  - (5) One (1) Nitric Acid Dissolving Tank, identified as Tank 54, constructed in 1986, with a maximum capacity of 750 gallons.
  - (6) One (1) Nitric Acid Dissolving Tank, identified as Tank 55, constructed in 2000, with a maximum capacity of 4,500 gallons.
- (b) One Ferric Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 63 and Tank 64, and scrubbers identified as Tank 30, Tank 65, and Tank 68, exhausting to stack ST-12, and consisting of the following:

- (1) One (1) Ferric Nitrate Tank, identified as Tank 58, constructed in 1986, with a maximum capacity of 4,500 gallons and a maximum process throughput rate of 500 lbs/hr.
- (2) One (1) Ferric Nitrate Tank, identified as Tank 59, constructed in 1988, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
- (3) One (1) Ferric Nitrate Tank, identified as Tank 60, constructed in 1992, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
- (4) One (1) Ferric Nitrate Tank, identified as Tank 61, constructed in 2002, with a maximum capacity of 4,500 gallons and a maximum process throughput rate of 500 lbs/hr.
- (5) One (1) Ferric Nitrate Tank, identified as Tank 62, constructed in 1992, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 500 lbs/hr.
- (c) One Copper Nitrate Reaction Process, with NOx emissions controlled by a series of reagent pre-scrubbers identified as Tank 39 and Tank 40, and scrubber identified as Tank 38, exhausting to stack ST-12, and consisting of the following:
  - (1) One (1) Copper Nitrate Tank, identified as Tank 42, constructed in 1988, with a maximum capacity of 2,800 gallons and a maximum process throughput rate of 357 lbs/hr.
  - (2) One (1) Copper Nitrate Tank, identified as Tank 43, constructed in 1986, with a maximum capacity of 4,000 gallons and a maximum process throughput rate of 357 lbs/hr.
  - Note: Stack S-12 is the common exhaust stack for the emissions from the Campaign, Ferric, and Copper Nitrate Reaction Processes.
- (d) Miscellaneous storage and holding tanks, including:
  - (1) One (1) Ferric Hydroxide Slurry Dispersion Tank, identified as Tank-14, constructed in 1989, with a maximum capacity of 1200 gallons.
  - (2) One (1) Copper Carbonate Slurry Tank, identified as Tank-20, constructed in 1989, with a maximum capacity of 1800 gallons.
  - (3) One (1) 30% Sodium Hydroxide Storage Tank, identified as Tank-23, constructed prior to 1978, with a maximum capacity of 7000 gallons.
  - (4) One (1) 35 % Hydrogen Peroxide Storage Tank, identified as Tank-26, constructed in 2006, with a maximum capacity of 6000 gallons.
  - (5) One (1) Regenerated Nitric Acid Storage Tank, identified as Tank-27, constructed in 2006, with a maximum capacity of 4000 gallons.
  - (6) One (1) Nitric Acid Storage Tank, identified as Tank-28, constructed in 1985, with a maximum capacity of 6000 gallons.

- (7) One (1) Ferric Nitrate Storage Tank, identified as Tank-33, constructed in 1997, with a maximum capacity of 6000 gallons.
- (8) One (1) Nitric Acid Storage Tank, identified as Tank-34, constructed in 2000, with a maximum capacity of 6000 gallons.
- (9) One (1) Ferric Nitrate Storage Tank, identified as Tank-37, constructed in 1988, with a maximum capacity of 4300 gallons.
- (10) One Copper Nitrate Feed Tank, identified as Tank-41, constructed in 1997, with a maximum capacity of 4000 gallons.
- (11) Four (4) Finished Metal Salt Storage Tanks, identified as Tank-46 through Tank-49, constructed in 1996, each with a capacity of 4300 gallons.
- (e) Four (4) Filter Presses, identified as FP-1 through FP-4, with FP-1, FP-3, and FP-4 being constructed in 1985, and FP-2 being constructed in 2003, each with a maximum capacity of 72 lbs/hr.
- (f) One (1) Auger Feed Tray Loading Station, identified as Tank 13, constructed in 2004, with a maximum capacity of 200 gallons.
- (g) One (1) Tray Dump Station, identified as US-1, constructed in 2004, with maximum capacity of 3,600 lbs/hr.
- (h) One (1) Tray Dump Station, identified as US-2, constructed in 2004, with a maximum capacity of 3,600 lbs/hr.
- (i) One (1) Cone Mill, identified as COMIL, constructed in 2008, with a maximum capacity of 3,600 lbs/hr, used in the de-lumping of solid product being dried in the Grieve Oven.

Process	Tanl	k IDs	Control Devices	Stacks		
Campaign Nitrate Reaction Process	Tank 17 Tank 19 Tank 45	Tank 50 Tank 54 Tank 55	Tank 52 Tank 53 Tank 56 (3 scrubbers in series)			
Ferric Nitrate Reaction Process	Tan Tan Tan	k 58 k 59 k 60 k 61 k 62	Tank 30 Tank 63 Tank 64 Tank 65 Tank 68 (5 scrubbers in unison)	Stack ST-12		
Copper Nitrate Reaction Process		k 42 k 43	Tank 38 Tank 39 Tank 40 (3 scrubbers in series)	1		
Misc Tanks	Tank 14 Tank 20 Tank 23 Tank 26 Tank 27 Tank 28 Tank 33	Tank 34 Tank 37 Tank 41 Tank 46 Tank 47 Tank 48 Tank 49	None	None		

#### Insignificant Activities

The source also consists of the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including:
  - (1) One (1) 100 Hp Boiler, identified as B-1, constructed in 1989, with a maximum capacity of 4.2 MMBtu/hr, exhausting to stack ST-10.
  - (2) Two (2) Office Furnaces, identified as OF-1 and OF-2, constructed in 1985 and 1992, each with a maximum capacity of 0.092 MMBtu/hr, exhausting to stacks ST-4 and ST-5 respectively.
  - (3) Two (2) Plant Furnaces, identified as PF-1 and PF-2, constructed in 1993 and 1997, with maximum capacities of 0.16 MMBtu/hr and 0.32 MMBtu/hr, exhausting to stacks ST-6 and ST-7 respectively.
  - (4) One (1) Hot Oil Heater, identified as HOH-1, constructed in 1984, with a maximum capacity of 0.519 MMBtu/hr, exhausting to stack ST-11.
  - (5) One (1) Drying Oven, identified as PQO, constructed in 2004, with a maximum capacity of 0.30 MMBtu/hr, exhausting to stack ST-8.
  - (6) One (1) Drying Oven, identified as GO, constructed in 2007, with a maximum capacity of 0.35 MMBtu/hr, exhausting to stack ST-9.
  - (7) One (1) Hot Water Heater, identified as HWH, constructed in 2004, with a maximum capacity of 0.07 MMBtu/hr, exhausting to stack ST-2.
- (b) Combustion Source flame safety purging on startup.
- (c) Vessels storing the following:
  - (1) Hydraulic oils
  - (2) Lubricating oils
- (d) Equipment used exclusively for the filling drums, pails or other packaging containers with lubricating oils.
- (e) Application of the following as temporary protective coatings:
  - (1) Greases
  - (2) Lubricants
- (f) Welding equipment related to manufacturing activities not resulting tin the emission of HAPs.
- (g) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (i) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (j) Blowdown for boiler B-1.

- (k) Emissions from a laboratory as defined in 326 IAC 2-7-1(21)(D).
- (I) Emissions from research and development activities as defined in 326 IAC 2-7-1(21)(F).
- (m) Space heaters using propane with heat input equal to or less than six million (6,000,000) British thermal units per hour, including two (2) propane space heaters, each with a capacity of 0.035 million British thermal units per hour.
- (n) One (1) water storage tank, with a capacity of 12,000 gallons.
- (o) Centrifuge dewatering process for copper-based precipitated product.

#### Existing Approvals

Since the issuance of the FESOP (0433-28562-00033) on March 30, 2010, the source has constructed or has been operating under the following additional approval:

Administrative Amendment No. 0433-31449-00033 issued on March 1, 2012.

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

#### Air Pollution Control Justification as an Integral Part of the Process

IDEM, OAQ has evaluated the information submitted and has determined that the reagent scrubbers should not be considered an integral part of the various reaction processes. This determination is based on the fact that the processes are still able to operate without the use of the scrubbers and their primary function is to reduce NOx emissions. The cost savings from the use of the scrubbers for the recovery of Nitric Acid does not outweigh the operating costs and initial installation costs of the equipment. Therefore, the permitting level will be determined using the potential to emit before the reagent scrubbers.

This conclusion was initially determined under FESOP F043-28562-00033 on March 30, 2010, and this determination will not be reviewed in this permit action.

#### Enforcement Issue

There are no enforcement actions pending.

#### **Emission Calculations**

See Appendix A of this document for detailed emission calculations.

#### County Attainment Status

The source is located in Floyd County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. <sup>1</sup>
PM <sub>2.5</sub>	Basic nonattainment designation effective federally April 5, 2005, for PM <sub>2.5</sub> .
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

<sup>1</sup>Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Clark County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X\*. The 1-hour standard was revoked effective June 15, 2005.

\*These documents are incorporated by reference. Copies referenced in this section may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(a) Ozone Standards

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

(b) PM<sub>2.5</sub>

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Floyd County as nonattainment for  $PM_{2.5}$ . On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for  $PM_{2.5}$  promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct  $PM_{2.5}$ , SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.

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

#### **Fugitive Emissions**

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

#### **Unrestricted Potential Emissions**

Unrestricted	Potential Emissions					
Pollutant	Tons/year					
PM	1.91					
PM <sub>10</sub>	0.67					
PM <sub>2.5</sub>	0.25					
SO <sub>2</sub>	0.02					
NO <sub>x</sub>	462					
VOC	0.14					
СО	2.20					
GHGs as CO <sub>2</sub> e	47.69					
Single HAP	0.05 (Hexane)					
Total HAP	0.05					

This table reflects the unrestricted potential emissions of the source.

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NOx is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source's NOx emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of  $CO_2$  equivalent emissions ( $CO_2e$ ) per year.
- (d) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

#### Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

		Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)											
Process/ Emission Unit	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	$SO_2$	NO <sub>x</sub>	VOC	со	GHGs	Total HAPs	Worst Single HAP			
Campaign Nitrate Reaction Process	-	-	-	-		-	-	-	-	-			
Ferric Nitrate Reaction Process	-	-	-	-	95.35	-	-	-	-	-			
Copper Nitrate Reaction Process	-	-	-	-		-	-	-	-	-			
Misc. Storage Tanks	-	-	-	-	1.00	-	-	-	-	-			
Insignificant Activities	0.05	0.20	0.20	0.02	2.62	0.14	2.20	47.69	0.05	0.05 (Hexane)			
Fugitive Emissions - Paved and Unpaved Roads	1.86	0.47	0.05	-	-	-	-	-	-	-			
Total PTE of Entire Source	1.91	0.67	0.25	0.02	98.97	0.14	2.20	47.69	0.05	0.05 (Hexane)			
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO <sub>2</sub> e	25	10			
PSD Major Source Thresholds	100	100	NA	NA	NA	100	100	NA	NA	NA			
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	100	100	NA	NA	NA	NA	NA			
*Under the Part 70 Per	mit progra	m (40 CFF	R 70), PM1	0 and PM	/12.5, not	particulat	e matter	(PM), are e	each cons	idered as a			

\*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a regulated air pollutant. \*\*PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

- (a) This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. Therefore, this source is subject to the provisions of 326 IAC 2-8 (FESOP).
- (b) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutants are emitted at 100 tons per year.
- (c) The source wide GHG emissions are less than one hundred thousand (<100,000) tons of  $CO_2$  equivalent ( $CO_2e$ ) emissions per year. GHG emissions do not affect the source PSD status.
- (d) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (e) This existing source is not a major stationary source under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because nonattainment regulated pollutants PM2.5, SO<sub>2</sub> and NOx are not emitted at a rate of 100 tons per year or more.

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), the source shall comply with the following:

(1) NOx emissions from stack ST-12 shall not exceed 21.77 pounds per hour.

Compliance with these limits, combined with the potential to emit NOx from all other emission units at this source, shall limit the source-wide total potential to emit of NOx to less than 100 tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-1.1-5 (Nonattainment New Source Review) not applicable to the entire source.

#### Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.
- (b) The requirements of the New Source Performance Standard for Nitric Acid Plants, 40 CFR 60.70, Subpart G, are still not included in the permit, since the source contains no nitric acid production units that produce weak nitric acid by either the pressure or atmospheric pressure process.
- (c) The requirements of the New Source Performance Standard for Metallic Mineral Processing Plants, 40 CFR 60.380, Subpart LL, are still not included in the permit, since the source does not produce metallic mineral concentrates from ore.
- (d) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Chemical Preparations Industry, Subpart BBBBBBB are still not included in the permit, since the source does not operate a chemical preparations facility as defined in 40 CFR 63.11588.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

#### **State Rule Applicability - Entire Source**

326 IAC 2-8-4 (FESOP) FESOP Applicability is discussed under the Potential to Emit After Issuance section above.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) PSD Applicability is discussed under the Potential to Emit After Issuance section above.

326 IAC 2-1.1-5 (Nonattainment New Source Review) Nonattainment New Source Review applicability is discussed under the Potential to Emit After Issuance section above.

326 IAC 2-4.1 (Major Sources of Hazardous Air Polluntants (HAP)) The operation of the source will emit less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### 326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 5-1 (Opacity Limitations) This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

#### 326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6.5 (PM Limitations Except Lake County) This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake/Porter/Clark/Floyd Counties) The source is located in Floyd County; however it does not have the potential to emit volatile organic compounds (VOCs) at levels equal to or greater than one hundred (100) tons per year.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties) The source is located in Floyd County; however, the source has limited their potential to emit NOx to less than one hundred (100) tons per year. Therefore, 326 IAC 10-1 is not applicable.

#### State Rule Applicability – Individual Facilities

Nitrate Reaction Processes (Campaign, Ferric, Copper)

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) Each of the various Nitrate Reaction Processes are not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each Process (Campaign, Ferric, Copper) is less than twenty-five (25) tons per year.

There are no 326 IAC 8 Rules that are applicable to the units.

# <u>Tanks</u>

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels) The source is located in Floyd County; however, it does not contain any stationary vessels used to store volatile organic liquid (VOL), therefore 326 IAC 8-9 is not applicable.

#### Boiler B-1

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from boiler B-1 is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

- Pt = Allowable Particulate Emission Limitation in pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
- Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.
- Q = 4.2 MMBtu/hr
- Pt = 0.75 lb/MMBtu

For Q less than 10 MMBtu/hr, Pt shall not exceed 0.6. Therefore, pursuant to 326 IAC 6-2-4, the PM emissions from the boiler B-1 shall not exceed 0.6 pounds per million Btu heat input (lb/MMBtu).

#### **Compliance Determination and Monitoring Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. 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.

Control	ol Parameter		Range	Excursions and Exceedances	
Scrubber Sumps (located below tanks 30, 38, 56, 65, 68)	Hydrogen Peroxide Concentration	Daily	$0.25 - 1.50\% H_2O_2$ To be determined by initial stack test	Response Steps	
Tank 30, Tank 38, Tank 39, Tank 40, Tank 52, Tank 53,	Flow Rate		20 - 40 gpm To be determined by initial stack test	Response	
Tank 56, Tank 63, Tank 64, Tank 65, Tank 68	Pressure Drop	Daily	$0.1 - 5.0$ inches $H_2O$ To be determined by initial stack test	Steps	

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

(b) The testing requirements applicable to this source are as follows:

[	Stack ID	Pollutant	Frequency of Testing	Limit or Requirement (lb/hr)
	ST-12	NOx	Once Every Five (5) Years	21.77 lb NOx / hr

These monitoring conditions are necessary because stack ST-12 and the scrubbers for the nitrate reaction processes must operate properly to ensure compliance with 326 IAC 2-8 (FESOP).

#### Recommendation

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

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

An application for the purposes of this review was received on June 27, 2014.

#### Conclusion

The operation of this stationary metal nitration plant producing metal nitrates shall be subject to the conditions of the attached FESOP Renewal No. 043-34680-00033.

#### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Julie Mendez at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-1243 or toll free at 1-800-451-6027 extension 4-1243.
- (b) A copy of the findings is available on the Internet at: <u>http://www.in.gov/ai/appfiles/idem-caats/</u>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <u>http://www.in.gov/idem/5881.htm</u>; and the Citizens' Guide to IDEM on the Internet at: <u>http://www.in.gov/idem/6900.htm</u>.

# Appendix A: Emissions Calculations **Emissions Summary**

Company Name: Blue Grass Specialties, L.L.C. Address City IN Zip: 895 Industrial Blvd, New Albany, IN 47150 Permit Number: 043-34680-00033 Reviewer: Julie Mendez

					Uncontrol	led Emission	s (ton/yr)				
Emission Unit	PM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	со	GHGs as CO <sub>2</sub> e	HAPs	Worst S	ingle HAP
Natural Gas Combustion	0.05	0.20	0.20	0.02	2.62	0.14	2.20	47.69	0.05	0.05	Hexane
Campaign Nitrate Reaction Process	-	-	-	-	211.45	-	-	-	-	-	-
Ferric Nitrate Reaction Process	-	-	-	-	176.21	-	-	-	-	-	-
Copper Nitrate Reaction Process	-	-	-	-	70.48	-	-	-	-	-	-
Unpaved Roads	1.83	0.47	0.05	-	-	-	-	-	-	-	-
Paved Roads	0.03	0.01	0.001	-	-	-	-	-	-	-	-
Misc. Storage Tanks	-	-	-	-	1.00	-	-	-	-	-	-
Storage / Handling	0.00003	0.00003	0.00003	-	-	-	-	-	-	-	-
Total	1.91	0.67	0.25	0.02	461.76	0.14	2.20	47.69	0.05	0.05	Hexane

					Limited	Emissions (	on/yr)				
Emission Unit	PM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	СО	GHGs as CO <sub>2</sub> e	HAPs	Worst Si	ingle HAP
Natural Gas Combustion	0.05	0.20	0.20	0.02	2.62	0.14	2.20	47.69	0.05	0.05	Hexane
Campaign Nitrate Reaction Process	-	-	-	-		-	-	-	-	-	-
Ferric Nitrate Reaction Process	-	-	-	-	95.35	-	-	-	-	-	-
Copper Nitrate Reaction Process	-	-	-	-	1	-	-	-	-	-	-
Unpaved Roads	1.83	0.47	0.05	-	-	-	-	-	-	-	-
Paved Roads	0.03	0.01	0.001	-	-	-	-	-	-	-	-
Misc. Storage Tanks	-	-	-	-	1.00	-	-	-	-	-	-
Storage / Handling	0.00003	0.00003	0.00003	-	-	-	-	-	-	-	-
Total	1.91	0.67	0.25	0.02	98.97	0.14	2.20	47.69	0.05	0.05	Hexane

					Controlle	ed Emissions	(ton/yr)				
Emission Unit	РМ	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	СО	GHGs as CO <sub>2</sub> e	HAPs	Worst S	ingle HAP
Natural Gas Combustion	0.05	0.20	0.20	0.02	2.62	0.14	2.20	47.69	0.05	0.05	Hexane
Campaign Nitrate Reaction Process	-	-	-	-	3.70	-	-	-	-	-	-
Ferric Nitrate Reaction Process	-	-	-	-	1.54	-	-	-	-	-	-
Copper Nitrate Reaction Process	-	-	-	-	1.23	-	-	-	-	-	-
Unpaved Roads	1.83	0.47	0.05	-	-	-	-	-	-	-	-
Paved Roads	0.03	0.01	0.001	-	-	-	-	-	-	-	-
Misc. Storage Tanks	-	-	-	-	1.00	-	-	-	-	-	-
Storage / Handling	0.00003	0.00003	0.00003	-	-	-	-	-	-	-	-
Total	1.91	0.67	0.25	0.02	10.10	0.14	2.20	47.69	0.05	0.05	Hexane

Note:

NOx emissions from the Nitration Reaction Processes, exhausting through stack ST-12, shall not exceed 21.77 lb/hr.

NOx emissions from Miscellaneous Storage Tanks, including nitric acid storage tanks, conservatively assumed to be 1.00 ton/yr.



#### Page 2 of 6 TSD App A

#### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Miscellaneous Natural Gas Combustion

# Company Name:Blue Grass Specialties, L.L.C.Address City IN Zip:895 Industrial Blvd, New Albany, IN 47150Permit Number:043-34680-00033Reviewer:Julie Mendez

Emission Unit	:	Heat Input Capacity	Potential Throughput	HHV
ID		MMBtu/hr	MMCF/yr	mmBtu
HWH	Hot Water Heater	0.07	0.60	mmscf
OF-1	Office Furnace	0.092	0.79	1020
OF-2	Office Furnace	0.092	0.79	
PF-1	Plant Furnace	0.16	1.37	
PF-2	Plant Furnace	0.32	2.75	
PQO	Drying Oven	0.30	2.58	
GO	Drying Oven	0.35	3.01	
B-1	100 hp Boiler	4.2	36.07	
HOH-1	Hot Oil Heater	0.519	4.46	
		6.10	52.41	

		Pollutant									
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO				
Emission Factor in Ib/MMCF	1.9	7.6	7.6	0.6	100	5.5	84				
					**see below						
Potential Emission in tons/yr	0.05	0.20	0.20	0.02	2.62	0.14	2.20				

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

#### **HAPS Calculations**

		HAPs - Organics										
Emission Factor in Ib/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics						
Potential Emission in tons/yr	5.5E-05	3.1E-05	2.0E-03	4.7E-02	8.9E-05	4.9E-02						

		HAPs - Metals										
Emission Factor in Ib/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total - Metals						
Potential Emission in tons/yr	1.3E-05	2.9E-05	3.7E-05	1.0E-05	5.5E-05	1.4E-04						
	•				Total HAPs	4.9E-02						
Methodology is the same as above.					Worst HAP	4.7E-02						

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

#### **Greenhouse Gas Calculations**

		Greenhouse Gas	
Emission Factor in lb/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	47.41	0.001	0.001
Summed Potential Emissions in tons/yr		47.41	
CO2e Total in tons/yr		47.69	

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64. Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03. Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A. Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission

ton/yr x N2O GWP (298).

#### Appendix A: Emissions Calculations **Reaction Tank Emissions**

# Company Name: Blue Grass Specialties, L.L.C. Address City IN Zip: 895 Industrial Blvd, New Albany, IN 47150 Permit Number: 043-34680-00033 Reviewer: Julie Mendez

# **Campaign Nitrate Reaction Process**

Tank	Nitric Acid Usage	Emission Factor	Pre-Scrubber 53 Efficiency	Pre-Scrubber 52 Efficiency	Scrubber 56 Efficiency	Uncontrolle	ed Emissions	Controlled	d Emissions
No.	(lbs/hr)	(lb NOx / lb Nitric Acid)	(%)	(%)	(%)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
17	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
19	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
45	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
50	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
54	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
55	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
						48.28	211.45	0.84	3.70

#### **Ferric Nitrate Reaction Process**

Tank	Nitric Acid Usage	Emission Factor	Pre-Scrubber 63 Efficiency	Pre-Scrubber 64 Efficiency	Scrubber 30 Efficiency	Scrubber 65 Efficiency	Scrubber 68 Efficiency	Uncontrolle	ed Emissions	Controlled	Emissions
No.	(lbs/hr)	(lb NOx / lb Nitric Acid)	(%)	(%)	(%)	(%)	(%)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
58	180	0.0447	-	65%	90%	50%	50%	8.05	35.24	0.07	0.31
59	180	0.0447	-	65%	90%	50%	50%	8.05	35.24	0.07	0.31
60	180	0.0447	-	65%	90%	50%	50%	8.05	35.24	0.07	0.31
61	180	0.0447	65%	-	90%	50%	50%	8.05	35.24	0.07	0.31
62	180	0.0447	65%	-	90%	50%	50%	8.05	35.24	0.07	0.31
								40.23	176.21	0.35	1.54

#### **Copper Nitrate Reaction Process**

Tank	Nitric Acid Usage	Emission Factor	Pre-Scrubber 40 Efficiency	Pre-Scrubber 39 Efficiency	Scrubber 38 Efficiency	Uncontroll	ed Emissions	Controlle	d Emissions
No.	(lbs/hr)	(Ib NOx / Ib Nitric Acid)	(%)	(%)	(%)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
42	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
43	180	0.0447	65%	90%	50%	8.05	35.24	0.14	0.62
						16.09	70.48	0.28	1.23
					-				
					Total from all lines:		458.14		6.48

#### Notes:

Emission Factor estimate based on 100% Nitric Acid usage and reaction involving iron. This factor was determined by an IDEM chemist. Actual emission rates (lb/hr) will be determined through a stack test.

#### Methodology:

Uncontrolled Emissions (lb/hr) = Nitric Acid Usage (lbs/hr) \* Emission Factor (lb NOx / lb Nitric Acid)

Uncontrolled Emissions (ton/yr) = Uncontrolled Emissions (lb/hr) \* 8760 hr/yr / 2000 lb/ton

Controlled Emissions (lb/hr) = Uncontrolled Emissions (lb/hr) \* (1 - Pre-Scrubber Efficiency) \* (1 - Scrubber Effi Controlled Emissions (ton/yr) = Controlled Emissions (lb/hr) \* 8760 hr/yr / 2000 lb/ton

# **Appendix A: Emission Calculations** Fugitive Dust Emissions - Unpaved Roads

Page 4 of 6 TSD App A

Company Name: Blue Grass Specialties, L.L.C. Address City IN Zip: 895 Industrial Blvd, New Albany, IN 47150 Permit Number: 043-34680-00033 **Reviewer: Julie Mendez** 

#### 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)

		Number of		Maximum		Maximum	Maximum	Maximum	Maximum
	Maximum	one-way trips	Maximum	Weight	Total Weight	one-way	one-way	one-way	one-way
	number of	per day per	trips per day	Loaded	driven per	distance	distance	miles	miles
Туре	vehicles	vehicle	(trip/day)	(tons/trip)	day (ton/day)	(feet/trip)	(mi/trip)	(miles/day)	(miles/yr)
Automobile - Employee Entering	42.0	1.0	42.0	2.0	84.0	120	0.023	1.0	348.4
Automobile - Employee Exiting	42.0	1.0	42.0	2.0	84.0	120	0.023	1.0	348.4
Automobile - Visitor Entering	2.0	1.0	2.0	2.0	4.0	120	0.023	0.0	16.6
Automobile - Visitor Exiting	2.0	1.0	2.0	2.0	4.0	120	0.023	0.0	16.6
Stepvan Delivery Entering	3.0	1.0	3.0	4.8	14.4	120	0.023	0.1	24.9
Stepvan Delivery Exiting	3.0	1.0	3.0	4.8	14.4	120	0.023	0.1	24.9
Semi Delivery Entering	9.0	1.0	9.0	40.0	360.0	585	0.111	1.0	364.0
Semi Delivery Exiting	9.0	1.0	9.0	20.0	180.0	585	0.111	1.0	364.0
		Totals	112.0		744.8			4.1	1507.7

Average Vehicle Weight Per Trip = 6.7 tons/trip Average Miles Per Trip = 0.04 miles/trip

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
S =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	6.7	6.7	6.7	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E \* [(365 - P)/365] (Equation 2 from AP-42 13.2.2) Mitigated Emission Factor, Eext = E \* [(365 - P)/365]

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

	PM	PM10	PM2.5	]
Unmitigated Emission Factor, Ef =	3.69	0.94	0.09	lb/mile
Mitigated Emission Factor, Eext =	2.43	0.62	0.06	lb/mile

			Unmitigated			Mitigated
	Unmitigated	Unmitigated	PTE of	Mitigated	Mitigated	PTE of
	PTE of PM	PTE of PM10	PM2.5	PTE of PM	PTE of PM10	PM2.5
Process	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Automobile - Employee Entering	0.64	0.16	0.02	0.42	0.11	0.01
Automobile - Employee Exiting	0.64	0.16	0.02	0.42	0.11	0.01
Automobile - Visitor Entering	0.03	0.01	0.00	0.02	0.01	0.00
Automobile - Visitor Exiting	0.03	0.01	0.00	0.02	0.01	0.00
Stepvan Delivery Entering	0.05	0.01	0.00	0.03	0.01	0.00
Stepvan Delivery Exiting	0.05	0.01	0.00	0.03	0.01	0.00
Semi Delivery Entering	0.67	0.17	0.02	0.44	0.11	0.01
Semi Delivery Exiting	0.67	0.17	0.02	0.44	0.11	0.01
Totals	2.78	0.71	0.07	1.83	0.47	0.05

# Methodology

Total Weight driven per day (ton/day) Maximum one-way distance (mi/trip) Maximum one-way miles (miles/day) Average Vehicle Weight Per Trip (ton/trip) Average Miles Per Trip (miles/trip) Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr)

- = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]
- = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
- = [Maximum trips per year (trip/day)] \* [Maximum one-way distance (mi/trip)]
- = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
- = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
- = (Maximum one-way miles (miles/yr)) \* (Unmitigated Emission Factor (lb/mile)) \* (ton/2000 lbs)
- = (Maximum one-way miles (miles/yr)) \* (Mitigated Emission Factor (lb/mile)) \* (ton/2000 lbs)

# Abbreviations

PM = Particulate Matter PM10 = Particulate Matter (<10 um) PM2.5 = Particulate Matter (<2.5 um) PTE = Potential to Emit

# Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads

Page 5 of 6 TSD App A

# Company Name:Blue Grass Specialties, L.L.C.Address City IN Zip:895 Industrial Blvd, New Albany, IN 47150Permit Number:043-34680-00033Reviewer:Julie Mendez

#### Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

	Maximum number of vehicles	Number of one-way trips per day per	Maximum trips per day	Maximum Weight Loaded	Total Weight driven per day	Maximum one-way distance	Maximum one- way distance	Maximum one- way miles	Maximum one- way miles		
-ype	per day	vehicle	(trip/day)	(tons/trip)	(ton/day)	(feet/trip)	(mi/trip)	(miles/day)	(miles/yr)		
Semi Delivery Entering	9.0	1.0	9.0	40.0	360.0	225	0.043	0.38	140.0		
Semi Delivery Exiting	9.0	1.0	9.0	20.0	180.0	225	0.043	0.38	140.0		
		Totals	18.0		540.0			0.77	280.0		
Average Vehicle Weight Per Trip = Average Miles Per Trip = Unmitigated Emission Factor, Ef =	0.04	tons/trip miles/trip 1 * (W)^1.02]	(Equation 1 from	n AP-42 13.2.	1)						
where k = W =	PM 0.011 30.0	PM10 0.0022 30.0	PM2.5 0.00054 30.0		article size multip rage vehicle wei	`	,				
sL =	0.6	0.6			-	•	•	d Roads (Table	13.2.1-3 for sumr		
sL =       0.6       0.6       g/m^2 = Ubiquitous Baseline Silt Loading Values of Paved Roads (Table 13.2.1-3 for summer mont         Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]       (Equation 2 from AP-42 13.2.1)         Mitigated Emission Factor, Eext =       Ef * [1 - (p/4N)]         where p =       125         days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)         N =       365											
Hereitigeted Freierien Freder - Ff	PM 0.222	PM10 0.044		lb/mile							
Unmitigated Emission Factor, Ef = Mitigated Emission Factor, Eext =	0.203	0.041	0.0100	lb/mile							

						Mitigated
	Unmitigated	Unmitigated	Unmitigated	Mitigated	Mitigated PTE	PTE of
	PTE of PM	PTE of PM10	PTE of PM2.5	PTE of PM	of PM10	PM2.5
Process	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Semi Delivery Entering	0.02	0.00	0.00	0.01	0.00	0.00
Semi Delivery Exiting	0.02	0.00	0.00	0.01	0.00	0.00
Totals	0.03	0.01	0.00	0.03	0.01	0.00

#### Methodology

Total Weight driven per day (ton/day) Maximum one-way distance (mi/trip) Maximum one-way miles (miles/day) Average Vehicle Weight Per Trip (ton/trip) Average Miles Per Trip (miles/trip) Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr) = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]

= [Maximum one-way distance (feet/trip) / [5280 ft/mile]

= [Maximum trips per year (trip/day)] \* [Maximum one-way distance (mi/trip)]

= SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]

= SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]

= [Maximum one-way miles (miles/yr)] \* [Unmitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)

= [Maximum one-way miles (miles/yr)] \* [Mitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)

# Abbreviations

PM = Particulate Matter PM10 = Particulate Matter (<10 um) PM2.5 = Particle Matter (<2.5 um) PTE = Potential to Emit

VMT = Vehicle Mile Traveled

#### Appendix A: Emissions Calculations Storage and Handling

### Company Name: Blue Grass Specialties, L.L.C. Address City IN Zip: 895 Industrial Blvd, New Albany, IN 47150 Permit Number: 043-34680-00033 Reviewer: Julie Mendez

					326 IAC 6-2-3(e)
Facility		PM/PM10/PM2.5	Potential to Emit	Potential to Emit	Allowable PM
Facility	Capacity	Emission Factor	PM/PM10/PM2.5	PM/PM10/PM2.5	Emission Rate
	lb/hr	lb/ton	lb/hr	ton/yr	lb/hr
Raw Material / Finished Product Storage and Handing	72.00	0.0002	0.000007	0.00003	0.44

#### Notes:

No emission factor exists for metal oxides and metal salts. Based on product specifications, the closest emission factor is for sodium carbonate. Emission Factor from AP-42 Chapter 8.12, Table 8.12-2 (0.0002 lb/ton) Based on the calcuations, these storage and handling operations comply with 326 IAC 6-3-2(e)

#### Methodology:

Potential to Emit PM/PM10/PM2.5 (lb/hr) = PM/PM10/PM2.5 Emission Factor (lb/ton) \* Capacity (lb/hr) / 2000 lb/ton Potential to Emit PM/PM10/PM2.5 (ton/yr) = Potential to Emit PM/PM10/PM2.5 (lb/hr) \* 8760 hr/yr / 2000 lb/ton 326 IAC 6-2-3(e) Allowable = 4.10 \* (Process Weight Rate (ton/hr))^0.67



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Michael R. Pence Governor Thomas W. Easterly Commissioner

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

TO: Paul McCauley Blue Grass Chemical Specialties 895 Industrial Blvd. New Albany, Indiana 47150

DATE: September 26, 2014

- FROM: Matt Stuckey, Branch Chief Permits Branch Office of Air Quality
- SUBJECT: Final Decision FESOP 043-34680-00033

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to: Daniel Sparks, President / Blue Grass Chemical Specialties OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 6/13/2013





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Michael R. Pence Governor Thomas W. Easterly Commissioner

September 26, 2014

TO: New Albany Floyd County Public Library

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

Subject: Important Information for Display Regarding a Final Determination

# Applicant Name:Blue Grass Chemical Specialties, LLCPermit Number:043-34680-00033

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

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

Enclosures Final Library.dot 6/13/2013



# Mail Code 61-53

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1	Paul McCauley Blue Grass Chemical Specialties, LLC 895 Industrial Blvd New Albany IN 47150-2522 (Source CAATS) confirmed delivery										
2		Daniel L Sparks President Blue Grass Chemical Specialties, LLC 895 Industrial Blvd New Albany IN 47150-2522 (RO CAATS)									
3		Floyd County Commissioners 2524 Corydon Pike, Ste 204 New Albany IN 47150 (Local Official)									
4		New Albany City Council and Mayors Office City County Building #316 New Albany IN 47150 (Local Official)									
5	New Albany Floyd Co Public Library 180 W Spring St New Albany IN 47150-3692 (Library)										
6	Floyd County Health Department 1917 Bono Rd New Albany IN 47150-4607 (Health Department)										
7	Ms. Sue Green 1985 Kepley Road Georgetown IN 47122 (Affected Party)										
8											
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Total number of pieces	Total number of Pieces	Postmaster, Per (Name of	The full declaration of value is required on all domestic and international registered mail. The
Listed by Sender	Received at Post Office	Receiving employee)	maximum indemnity payable for the reconstruction of nonnegotiable documents under Express
2		0 1 7 7	Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per
			occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500.
			The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal
6			insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on
U			inured and COD mail. See International Mail Manual for limitations o coverage on international
			mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.