INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: Mar. 30, 2010

RE: Blue Grass Chemical Specialties, LLC / 043-28562-00033

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07

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New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

Blue Grass Chemical Specialties, LLC
895 Industrial Boulevard
New Albany, Indiana 47150

(herein known as the Permittee) is hereby authorized to construct and 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.: F043-28562-00033	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: Mar. 30, 2010 Expiration Date: Mar. 30, 2015

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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.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

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

Source Address:	895 Industrial Boulevard, New Albany, Indiana 47150
Mailing Address:	895 Industrial Boulevard, New Albany, IN 47150
General Source Phone Number:	(812) 948-1115
SIC Code:	2899
County Location:	Floyd
Source Location Status:	Nonattainment for PM2.5 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

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	Tank 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)	Stack ST-12
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)	
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.

(j) Blowdown for boiler B-1.

(k) Emissions from a laboratory as defined in 326 IAC 2-7-1(21)(D).

(l) Emissions from research and development activities as defined in 326 IAC 2-7-1(21)(F).

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 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F043-28562-00033, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.5 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.6 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.7 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.8 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.9 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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

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

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 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.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit 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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or

potential to emit. The PMPs do not require the certification by 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.14 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, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(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 the certification 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.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by an "authorized individual" need only be referenced by the date of the original report.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F043-28562-00033 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.16 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.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.18 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 the certification 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.19 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(40). The renewal application does require the certification 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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.20 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 shall be certified 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.21 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) through (d) 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) through (d). 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)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(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.22 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.23 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:

(a) 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.24 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

The application which shall be submitted by the Permittee does require the certification 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.25 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 within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) 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.26 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), 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.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) 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 5-1-3 (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.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

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 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) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification 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 certification 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)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance 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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 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.

(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.13 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.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

(2) review of operation and maintenance procedures and records; 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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require the certification by 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.16 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. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.17 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. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Indiana Department of Environmental Management
Compliance 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) 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.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

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

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

SECTION D.1 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 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 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, 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

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 as needed 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, within one hundred eighty (180) days after permit issuance, 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 Section C- Performance Testing.

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

D.1.4 Visible Emissions Notations

(a) Daily visible emission notations of the stack ST-12 exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.5 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 in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit.

(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 in accordance with Section C - Response to Excursions or Exceedances. 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 in accordance with Section C - Response to Excursions or Exceedances. A hydrogen peroxide concentration that is below the mentioned minimum is not a deviation from this permit.

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

The 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.1.6 Record Keeping Requirement

(a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the stack ST-12 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that date).

(b) To document compliance with Condition D.1.5(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).

(c) To document compliance with Condition D.1.5(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).

(d) To document compliance with Condition D.1.5(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).

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

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 (lb/MMBtu).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Blue Grass Chemical Specialties, LLC
Source Address: 895 Industrial Boulevard, New Albany, Indiana 47150
Mailing Address: 895 Industrial Boulevard, New Albany, IN 47150
FESOP Permit No.: F043-28562-00033

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

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, LLC
Source Address: 895 Industrial Boulevard, New Albany, Indiana 47150
Mailing Address: 895 Industrial Boulevard, New Albany, IN 47150
FESOP Permit No.: F043-28562-00033

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

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

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

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

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

A certification is not required for this report.

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

Source Name: Blue Grass Chemical Specialties, LLC
Source Address: 895 Industrial Boulevard, New Albany, Indiana 47150
Mailing Address: 895 Industrial Boulevard, New Albany, IN 47150
FESOP Permit No.: F043-28562-00033

Months: _____ to _____ Year: _____

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

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Mail to: Permit Administration & Support Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Blue Grass Chemical Specialties, LLC
895 Industrial Boulevard
New Albany, Indiana 47150

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that Blue Grass Chemical Specialties, LLC 895 Industrial Boulevard, New Albany, Indiana 47150, completed construction of the metal nitration plant. on _____in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on October 13, 2009 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F043-28562-00033, Plant ID No. 043-00033 issued on _____.

5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana

on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature_____
Name_____ (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a New Source Construction and Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Blue Grass Chemical Specialties, LLC**
Source Location:	**895 Industrial Boulevard, New Albany, IN 47150**
County:	**Floyd**
SIC Code:	**2899**
Operation Permit No.:	**F 043-28562-00033**
Permit Reviewer:	**Jason R. Krawczyk**

On February 24, 2010, the Office of Air Quality (OAQ) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Blue Grass Chemical Specialties, LLC had applied for a New Source Construction and Federally Enforceable State Operating Permit (FESOP) to construct and operate a stationary metal nitration plant producing metal oxides. The notice also stated that the OAQ proposed to issue a New Source Construction and FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On March 15, 2010, Ms. Nicole Galavotti, Senior Environmental Engineer for Shields Environmental Associates, Inc., on behalf of Blue Grass Chemical Specialties, Inc., submitted comments to IDEM, OAQ on the draft New Source Construction and Federally Enforceable State Operating Permit.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Blue Grass Chemical Specialties, Inc. would like the emission unit descriptions of A.2(a)(1) and (2) and the emission unit descriptions of D.1(a)(1) and (2) revised to correct a misidentification of the tanks.

Response to Comment 1:

IDEM agrees with the recommended changes, since it is only a descriptive change. The permit has been revised as follows:

...

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 ~~1997~~ **2008**, with a maximum capacity of ~~2,200~~ **3,600** gallons.

(2) One (1) Nitric Acid Dissolving Tank, identified as Tank 19, constructed in ~~2008~~ **1997**, with a maximum capacity of ~~3,600~~ **2,200** gallons, capable of precipitating ferric hydroxide at a process throughput rate of 275 lbs/hr.

...

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 ~~1997~~ **2008**, with a maximum capacity of ~~2,200~~ **3,600** gallons.

(2) One (1) Nitric Acid Dissolving Tank, identified as Tank 19, constructed in ~~2008~~ **1997**, with a maximum capacity of ~~3,600~~ **2,200** gallons, capable of precipitating ferric hydroxide at a process throughput rate of 275 lbs/hr.

...

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

...

IDEM Contact

(a) Questions regarding this proposed New Source Construction and Federally Enforceable State Operating Permit can be directed to Jason R. Krawczyk 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) 232-8427 or toll free at 1-800-451-6027 extension 2-8427.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name:	**Blue Grass Chemical Specialties, LLC**
Source Location:	**895 Industrial Boulevard, New Albany, IN 47150**
County:	**Floyd**
SIC Code:	**2899**
Operation Permit No.:	**F 043-28562-00033**
Permit Reviewer:	**Jason R. Krawczyk**

On October 13, 2009, the Office of Air Quality (OAQ) received an application from Blue Grass Chemical Specialties, LLC related to the construction and operation of a new metal nitration plant producing metal oxides.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Floyd County.

SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective July 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Floyd 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.
Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx 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 NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Floyd as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of 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 PM2.5 promulgated on May 8, 2008, and

effective on July 15, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

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

Fugitive Emissions

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

Background and Description of Permitted Emission Units

There are no permitted emission units at this source.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission unit(s):

(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 1997, with a maximum capacity of 2,200 gallons. throughput rate of 275 lbs/hr.

(2) One (1) Nitric Acid Dissolving Tank, identified as tank 19, constructed in 2008, with a maximum capacity of 3,600 gallons, capable of precipitating ferric hydroxide at a process

(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	Tank IDs	Control Devices	Stacks
Campaign Nitrate Reaction Process	Tank 17, Tank 50, Tank 19, Tank 54, Tank 45, Tank 55	Tank 52, Tank 53, Tank 56 (3 scrubbers in series)	Stack ST-12
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)	
Copper Nitrate Reaction Process	Tank 42, Tank 43	Tank 38, Tank 39, Tank 40 (3 scrubbers in series)	
Misc Tanks	Tank 14, Tank 34, Tank 20, Tank 37, Tank 23, Tank 41, Tank 26, Tank 46, Tank 27, Tank 47, Tank 28, Tank 48, Tank 33, Tank 49	None	None

The source 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.

(j) Blowdown for boiler B-1.

(k) Emissions from a laboratory as defined in 326 IAC 2-7-1(21)(D).

(l) Emissions from research and development activities as defined in 326 IAC 2-7-1(21)(F).

"Integral Part of the Process" Determination

The applicant has submitted the following information to justify why the scrubbers and pre-scrubbers associated with the Ferric Nitrate Reaction Tanks, Copper Nitrate Reaction Tanks, and Campaign Nitrate Reaction Tanks should be considered an integral part of those processes:

(a) Removal of NOx is integral to the preservation of the health and safety of our employees and the environment. (The process is still able to operate without the use of the scrubbers.)

(b) Removal of NOx is integral to the recovery of Nitric Acid.

(1) Scrubbers identified as Tank 52, Tank 53, and Tank 56 of the Campaign Nitrate Reaction Process work in series to produce 16 gallons per day of 30% nitric acid or an equivalent of 7.3 gallons per day of 66%

(2) Scrubbers identified as Tank 30, Tank 63, Tank 64, and Tank 65 of the Ferric Nitrate Reaction Process work in unison to produce approximately 54 gallons per day of 35% Nitric acid, which is equivalent to 28.6 gallons of 66% nitric acid.

(3) Scrubbers identified as Tank 38, Tank 39, and Tank 40 of the Copper Nitrate Reaction Process work in series to produce 9 gallons per day of 5% nitric acid equivalent to 0.68 gallons per day of 66%

The total nitric acid recovered (at 66%), is approximately 36.58 gallons per day, or 13352 gallons per year assuming the plant operates 8,760 hours per year.

Each gallon of Nitric acid (66% as delivered) costs $1.75.

13352 gallons * $1.75 = $23,366 in annual savings.

The source purchase records indicated that between 2004 and 2009, the maximum amount of nitric acid purchased in any one year was 424,765 gallons and that the average yearly purchase was 283,963 gallons.

Therefore the maximum annual savings is only 3.14% of the total amount paid to purchase nitric acid in any one year. This savings does not take into account the annual maintenance costs or initial costs for installation of the scrubbers.

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.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	Less than 100
PM10[(1)]	Less than 100
PM2.5	Less than 100
SO_2	Less than 100
NO_x	Greater than 250
VOC	Less than 100
CO	Less than 100

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Single HAP	Less than 10
Combined HAPs	Less than 25

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of NOx is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued *a* New Source Construction Permit (326 IAC 2-5.1-3) and a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

PTE of the Entire Source After Issuance of the FESOP

The table below summarizes the potential to emit of the entire source after issuance of this FESOP, reflecting all limits, of the emission units. Any control equipment is considered federally 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.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10*	PM2.5	SO_2	NOx**	VOC	CO	Total HAPs	Worst Single HAP
Campaign Nitrate Reaction Process	-	-	-	-	95.35	-	-	-	-
Ferric Nitrate Reaction Process	-	-	-	-		-	-	-	-
Copper Nitrate Reaction Process	-	-	-	-		-	-	-	-
Natural Gas Combustion	0.05	0.20	0.20	0.02	2.67	0.15	2.25	0.05	0.05 Hexane
Unpaved Roads	1.83	0.47	0.05	-	-	-	-	-	-
Paved Roads	0.15	0.03	0.00	-	-	-	-	-	-
Material Handling	-	-	-	-	-	-	-	-	-
Misc. Storage Tanks	-	-	-	-	1.00	-	-	-	-
Total PTE of Entire Source	**2.03**	**0.70**	**0.25**	**0.02**	**99.03**	**0.15**	**2.25**	**0.05**	**0.05 Hexane**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

**The Campaign, Ferric, and Copper Nitrate Reaction Processes exhaust through a common stack ST-12. NOx emissions from stack ST-12 are limited to 21.77 pounds per hour.

(a) FESOP Status

This new 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. In addition, this new source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), 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 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(b) PSD Minor Source

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit NOx is limited to less than 100 tons per year and the potential to emit all other attainment regulated pollutants are less than 100 tons per year, and this source is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the limits identified above.

(c) Nonattainment New Source Review

This existing source is not a major stationary source, under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because the potential to emit particulate matter with a diameter less than ten 2.5 micrometers (PM2.5), is less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Nitric Acid Plants, 40 CFR 60, Subpart G (326 IAC 12), are 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.

(b) The requirements of the New Source Performance Standard for Metallic Mineral Processing Plants, 40 CFR 60, Subpart LL (326 IAC 12), are not included in the permit, since the source does not produce metallic mineral concentrates from ore.

(c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources: Chemical Preparations Industry, 40 CFR 63.11579, Subpart BBBBBBB, are not included in the permit, since this source does not operate a chemical preparations facility as defined in 40 CFR 63.11588.

(e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

(f) 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.

State Rule Applicability Determination

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

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

Nonattainment New Source Review applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is 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.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

(1) 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.

(2) 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.

(g) 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.

(h) 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.

(i) 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.

Nitrate Reaction Processes (Campaign, Ferric, Copper)

(j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the various Nitrate Reaction Processes 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.

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

Tanks

(l) 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

(m) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
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, Monitoring and Testing Requirements

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

Emission Units	Parameter	Frequency	Range	Excursions and Exceedances
ST-12	Visible Emissions	Daily	Normal - Abnormal	Response Steps
Scrubber Sumps (located below tanks: 38,56,30,65,68)	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, Tank 56, Tank 63, Tank 64, Tank 65	Flow Rate	Daily	20 - 40 gpm To be determined by initial stack test	Response Steps
	Pressure Drop		0.1 - 5.0 inches H20 To be determined by initial stack test	

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

Stack ID	Timeframe for Testing	Pollutant(s)	Frequency of Testing	Limit or Requirement (lb/hr)
ST-12	Within 180 days after permit issuance	NOx	Once Every Five (5) Years.	21.77 lb NOx / hr

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on October 13, 2009.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and FESOP No. 043-28652-00033. The staff recommends to the Commissioner that this New Source Construction and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jason R. Krawczyk 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) 232-8427or toll free at 1-800-451-6027 extension 2-8427.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

SUMMARY OF EMISSIONS

Company Name: Blue Grass Chemical Specialties
Address City IN Zip: 895 Industrial Boulevard, New Albany, IN 47150
Permit Number: 043-28562-00033
Plt ID: 043-00033
Reviewer: Jason R. Krawczyk
Date: January 19, 2010

Uncontrolled Emissions (Tons/Yr)

Pollutant	Nat. Gas Combustion	Nitration Reaction Processes			Unpaved Roads	Paved Roads	Misc. Storage Tanks	Storage / Handling	Total
		Campaign	Ferric	Copper					
PM	0.05	-	-	-	1.83	0.15	-	0.00	2.03
PM10	0.20	-	-	-	0.47	0.03	-	0.00	0.70
PM2.5	0.20	-	-	-	0.05	0.00	-	0.00	0.25
VOC	0.15	-	-	-	-	-	-	-	0.15
NOx	2.67	211.45	176.21	70.48	-	-	1.00	-	461.81
SO2	0.02	-	-	-	-	-	-	-	0.02
CO	2.25	-	-	-	-	-	-	-	2.25
Single HAP	0.05	-	-	-	-	-	-	-	0.05
Combined HAPs	0.05	-	-	-	-	-	-	-	0.05

Controlled Emissions (Tons/Yr)

Pollutant	Nat. Gas Combustion	Nitration Reaction Processes			Unpaved Roads	Paved Roads	Misc. Storage Tanks	Storage / Handling	Total
		Campaign	Ferric	Copper					
PM	0.05	-	-	-	1.83	0.15	-	0.00	2.03
PM10	0.20	-	-	-	0.47	0.03	-	0.00	0.70
PM2.5	0.20	-	-	-	0.05	0.00	-	0.00	0.25
VOC	0.15	-	-	-	-	-	-	-	0.15
NOx	2.67	3.70	1.54	1.23	-	-	1.00	-	10.15
SO2	0.02	-	-	-	-	-	-	-	0.02
CO	2.25	-	-	-	-	-	-	-	2.25
Single HAP	0.05	-	-	-	-	-	-	-	0.05
Combined HAPs	0.05	-	-	-	-	-	-	-	0.05

Limited Emissions (Tons/Yr)

Pollutant	Nat. Gas Combustion	Nitration Reaction Processes			Unpaved Roads	Paved Roads	Misc. Storage Tanks	Storage / Handling	Total
		Campaign	Ferric	Copper					
PM	0.05	-	-	-	1.83	0.15	-	0.00	2.03
PM10	0.20	-	-	-	0.47	0.03	-	0.00	0.70
PM2.5	0.20	-	-	-	0.05	0.00	-	0.00	0.25
VOC	0.15	-	-	-	-	-	-	-	0.15
NOx	2.67	95.35			-	-	1.00	-	99.03
SO2	0.02	-	-	-	-	-	-	-	0.02
CO	2.25	-	-	-	-	-	-	-	2.25
Single HAP (HCl)	0.05	-	-	-	-	-	-	-	0.05
Combined HAPs	0.05	-	-	-	-	-	-	-	0.05

Note:

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

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

Appendix A: Emissions Calculations
Miscellaneous Natural Gas Combustion

Company Name: **Blue Grass Chemical Specialties**
Address City IN Zip: **895 Industrial Boulevard, New Albany, IN 47150**
Permit Number: **043-28562-00033**
Plt ID: **043-00033**
Reviewer: **Jason R. Krawczyk**
Date: **January 19, 2010**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Unit ID	
0.07	0.61	HWH	Hot Water Heater
0.09	0.81	OF-1	Office Furnace
0.09	0.81	OF-2	Office Furnace
0.16	1.40	PF-1	Plant Furance
0.32	2.80	PF-2	Plant Furance
0.30	2.63	PQO	Drying Oven
0.35	3.07	GO	Drying Oven
4.20	36.79	B-1	100 Hp Boiler
0.52	4.55	HOH-1	Hot Oil Heater
6.10	53.46		

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.05	0.20	0.02	2.67	0.15	2.25

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 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/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Miscellaneous Natural Gas Combustion
HAPs Emissions

Company Name: Blue Grass Chemical Specialties
Address City IN Zip: 895 Industrial Boulevard, New Albany, IN 47150
Permit Number: 043-28562-00033
Plt ID: 043-00033
Reviewer: Jason R. Krawczyk
Date: January 19, 2010

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.614E-05	3.208E-05	2.005E-03	4.812E-02	9.089E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.337E-05	2.940E-05	3.742E-05	1.016E-05	5.614E-05

Methodology is the same as page 2.

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

Appendix A: Emissions Calculations
Reaction Tank Emissions

Company Name: Blue Grass Chemical Specialties
Address City IN Zip: 895 Industrial Boulevard, New Albany, IN 47150
Permit Number: 043-28562-00033
Plt ID: 043-00033
Reviewer: Jason R. Krawczyk
Date: January 19, 2010

Campaign Nitrate Reaction Process

Tank	Nitric Acid Usage	Emission Factor	Pre-Scrubber 53 Efficiency	Pre-Scrubber 52 Efficiency	Scrubber 56 Efficiency	Uncontrolled Emissions		Controlled Emissions	
No.	(lbs/hr)	(lb NOx / lb Nitiric Acid)	(%)	(%)	(%)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
17	180	0.0447	65.00%	90.00%	50.00%	8.05	35.24	0.14	0.62
19	180	0.0447	65.00%	90.00%	50.00%	8.05	35.24	0.14	0.62
45	180	0.0447	65.00%	90.00%	50.00%	8.05	35.24	0.14	0.62
50	180	0.0447	65.00%	90.00%	50.00%	8.05	35.24	0.14	0.62
54	180	0.0447	65.00%	90.00%	50.00%	8.05	35.24	0.14	0.62
55	180	0.0447	65.00%	90.00%	50.00%	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	Uncontrolled Emissions		Controlled Emissions	
No.	(lbs/hr)	(lb NOx / lb Nitiric Acid)	(%)		(%)	(%)	(%)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
58	180	0.0447	-	65.00%	90.00%	50.00%	50.00%	8.05	35.24	0.07	0.31
59	180	0.0447	-	65.00%	90.00%	50.00%	50.00%	8.05	35.24	0.07	0.31
60	180	0.0447	-	65.00%	90.00%	50.00%	50.00%	8.05	35.24	0.07	0.31
61	180	0.0447	65.00%	-	90.00%	50.00%	50.00%	8.05	35.24	0.07	0.31
62	180	0.0447	65.00%	-	90.00%	50.00%	50.00%	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	Uncontrolled Emissions		Controlled Emissions	
No.	(lbs/hr)	(lb NOx / lb Nitiric Acid)	(%)	(%)	(%)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
42	180	0.0447	65.00%	90.00%	50.00%	8.05	35.24	0.14	0.62
43	180	0.0447	65.00%	90.00%	50.00%	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) * 8,760 hours / 2,000 lbs
Controlled Emissions (lb/hr) = Uncontrolled Emissions (lb/hr) * (1- Pre-Scrubber Efficiency) * (1- Scrubber Efficiency) * (1-Scrubber Efficiency) * [(1- Scrubber Efficiency) for Ferric Nitrate Reaction Process]
Conrolled Emissions (ton/yr) = Controlled Emissions (lb/hr) * 8,760 hours / 2,000 lbs

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: **Blue Grass Chemical Specialties**
Address City IN Zip: **895 Industrial Boulevard, New Albany, IN 47150**
Permit Number: **043-28562-00033**
Plt ID: **043-00033**
Reviewer: **Jason R. Krawczyk**
Date: **January 19, 2010**

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 (12/2003).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Automobile - Employee Entering	42.0	1.0	42.0	2.0	84.0	120	0.023	0.95	348.4
Automobile - Employee Exiting	42.0	1.0	42.0	2.0	84.0	120	0.023	0.95	348.4
Automobile - Visitor Entering	2.0	1.0	2.0	2.0	4.0	120	0.023	0.05	16.6
Automobile - Visitor Exiting	2.0	1.0	2.0	2.0	4.0	120	0.023	0.05	16.6
Stepvan Delivery Entering	3.0	1.0	3.0	4.8	14.4	120	0.023	0.07	24.9
Stepvan Delivery Exiting	3.0	1.0	3.0	4.8	14.4	120	0.023	0.07	24.9
Semi Delivery Entering	9.0	1.0	9.0	40.0	360.0	585	0.111	1.00	364.0
Semi Delivery Exiting	9.0	1.0	9.0	20.0	180.0	585	0.111	1.00	364.0
		Total	**112.0**		**744.8**			**4.1**	**1507.7**

Average Vehicle Weight Per Trip = 6.7 tons/trip
Average Miles Per Trip = 0.02 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 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
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)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
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

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (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
	2.78	**0.71**	**0.07**	**1.83**	**0.47**	**0.05**

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

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

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: **Blue Grass Chemical Specialties**
Address City IN Zip: **895 Industrial Boulevard, New Albany, IN 47150**
Permit Number: **043-28562-00033**
Plt ID: **043-00033**
Reviewer: **Jason R. Krawczyk**
Date: **January 19, 2010**

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 (12/2003).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (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
		Total	**18.0**		**540.0**			**0.8**	**280.0**

Average Vehicle Weight Per Trip = 30.0 tons/trip
Average Miles Per Trip = 0.04 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL/2)^0.65 * (W/3)^1.5 - C] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.082	0.016	0.0024	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	30.0	30.0	30.0	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	0.00036	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
sL =	0.6	0.6	0.6	g/m^2 = Ubitiguous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]
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 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	1.19	0.23	0.03	lb/mile
Mitigated Emission Factor, Eext =	1.08	0.21	0.03	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip	0.08	0.02	0.00	0.08	0.01	0.00
Vehicle (leaving plant) (one-way trip)	0.08	0.02	0.00	0.08	0.01	0.00
	0.17	**0.03**	**0.00**	**0.15**	**0.03**	**0.00**

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

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

Appendix A: Emissions Calculations
Storage and Handling

Company Name: Blue Grass Chemical Specialties
Address City IN Zip: 895 Industrial Boulevard, New Albany, IN 47150
Permit Number: 043-28562-00033
Plt ID: 043-00033
Reviewer: Jason R. Krawczyk
Date: January 19, 2010

Facility	Capacity	PM/PM10/PM2.5 Emission Factor	Potential to emit PM/PM10/PM2.5	Potential to emit PM/PM10/PM2.6	326 IAC 6-2-3(e) Allowable PM Emission Rate
	lbs/hr	lbs/ton	lbs/hr**	tons/yr	lbs/hr
Raw Material / Finished Product Storage and Handling	72.00	0.0002	0.00	0.00	0.44
		Totals	**0.00**	**0.00**	**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 calculations, these storage and handling operations comply with 326 IAC 6-3-2(e).

Methodology:
Potential to emit of PM/PM10/PM2.5 (lbs/hr)= PM/PM10/PM2.5 emission factor (lbs/ton) * Capacity (lbs/hr) * 1 ton / 2000 lbs
Potential to emit of PM/PM10/PM2.5 (tons/yr) = PPotential to emit of PM/PM10/PM2.5 (lbs/hr) * 8760 hours * 1 ton / 2000 lbs
326 IAC 6-2-3(e) Allowable = 4.10(Process Weight Rate)^0.67

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Paul McCauley
Blue Grass Chemical Specialties, LLC
895 Industrial Blvd
New Albany IN 47150

DATE: Mar. 30, 2010

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

SUBJECT: Final Decision
FESOP
043-28562-00033

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 L. Sparks President Blue Grass Chemical Specialties, LLC
Nicole Galavotti Shield Environmental Assoc. Inc.
OAQ Permits Branch Interested Parties List

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

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Indianapolis, Indiana 46204
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Toll Free (800) 451-6027
www.idem.IN.gov

Mar. 30, 2010

TO: New Albany Floyd Co. 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, LLC**
Permit Number: **043-28562-00033**

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 11/30/07

Mail Code 61-53

IDEM Staff	BMILLER 3/30/2010 Blue Grass Chemical Specialties, LLC 043-28562-00033 (final)		
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

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1		Paul McCauley Blue Grass Chemical Specialties, LLC 895 Industrial Blvd New Albany IN 47150-2252 (Source CAATS) ***Via Confirmed Delivery***									
2		Daniel L Sparks President Blue Grass Chemical Specialties, LLC 895 Industrial Blvd New Albany IN 47150-2252 *(RO CAATS)*									
3		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 *(Affected Party)*									
4		Floyd County Commissioners 311-319 West 1st St, Rm 214 New Albany IN 47150 *(Local Official)*									
5		New Albany City Council and Mayors Office City County Building #316 New Albany IN 47150 *(Local Official)*									
6		New Albany Floyd Co Public Library 180 W Spring St New Albany IN 47150-3692 *(Library)*									
7		Floyd County Health Department 1917 Bono Rd New Albany IN 47150-4607 *(Health Department)*									
8		Ms. Sue Green 1985 Kepley Road Georgetown IN 47122 *(Affected Party)*									
9		Ms. Nicole Galavotti Shield Environmental Assc. Inc. 948 Floyd Drive Lexington KY 40505 *(Consultant)*									
10		VT Industries Ideal Door Division 890 Central Court New Albany IN 47150 *(Affected Party)*									
11		Cameo Marble 540 Central Court New Albany IN 47150 *(Affected Party)*									
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