



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
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TO: Interested Parties / Applicant

DATE: December 7, 2012

RE: U.S. Mineral Products Company dba Isolatek International / 069-31651-00021

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, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**U.S. Mineral Products Company (d/b/a Isolatek International)
701 North Broadway Street
Huntington, Indiana 46750**

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

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

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

Operation Permit No.: T069-31651-00021	
Issued by:  Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 7, 2012 Expiration Date: December 7, 2013

TABLE OF CONTENTS

A. SOURCE SUMMARY	6
A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]	
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3 Part 70 Permit Applicability [326 IAC 2-7-2]	
B. GENERAL CONDITIONS	9
B.1 Definitions [326 IAC 2-7-1]	
B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]	
B.5 Severability [326 IAC 2-7-5(5)]	
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]	
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]	
B.11 Emergency Provisions [326 IAC 2-7-16]	
B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]	
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]	
B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]	
B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]	
B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]	
B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]	
B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]	
B.20 Source Modification Requirement [326 IAC 2-7-10.5]	
B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	19
Emission Limitations and Standards [326 IAC 2-7-5(1)]	
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Opacity [326 IAC 5-1]	
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5 Fugitive Dust Emissions [326 IAC 6-4]	
C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-7-6(1)]	
C.7 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.8 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]	
C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64] [326 IAC 3-8]	

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

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

- C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5]
[326 IAC 2-7-6]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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

- C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)]
[326 IAC 2-6]
- C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64]
[326 IAC 3-8]

Stratospheric Ozone Protection

- C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 27

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

- D.1.1 Prevention of Significant Deterioration (PSD) SO₂ and NO_x Minor Limits [326 IAC 2-2]
- D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.3 Particulate Control [326 IAC 2-7-6(6)]
- D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.1.5 Visible Emissions Notations
- D.1.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.1.7 Broken or Failed Bag Detection

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

- D.1.8 Record Keeping Requirements
- D.1.9 Reporting Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 31

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

- D.2.1 Particulate [326 IAC 6-3-2]
- D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

- D.2.3 Visible Emissions Notations [40 CFR 64]

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

- D.2.4 Record Keeping Requirements

D.3. EMISSIONS UNIT OPERATION CONDITIONS..... 33

Emission Limitations and Standards [326 IAC 2-7-5(1)]33

- D.3.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]
- D.3.2 Particulate [326 IAC 6-3-2]
- D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.4 Particulate Control [326 IAC 2-7-6(6)]
- D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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

- D.3.6 Visible Emissions Notations [40 CFR 64]
- D.3.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]
- D.3.8 Broken or Failed Bag Detection

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

- D.3.9 Record Keeping Requirements

D.4. EMISSIONS UNIT OPERATION CONDITIONS 36

Emission Limitations and Standards [326 IAC 2-7-5(1)]36

- D.4.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]
- D.4.2 Particulate [326 IAC 6-3-2]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.4.4 Particulate Control [326 IAC 2-7-6(6)]

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

- D.4.5 Visible Emissions Notations
- D.4.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
- D.4.7 Broken or Failed Bag Detection

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

- D.4.8 Record Keeping Requirements

D.5. EMISSIONS UNIT OPERATION CONDITIONS 40

Emission Limitations and Standards [326 IAC 2-7-5(1)]40

- D.5.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]
- D.5.2 Particulate [326 IAC 6-3-2]
- D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.5.4 Particulate Control [326 IAC 2-7-6(6)]

D.6. EMISSIONS UNIT OPERATION CONDITIONS 43

Emission Limitations and Standards [326 IAC 2-7-5(1)]40

- D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

E.1. EMISSIONS UNIT OPERATION CONDITIONS 45

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

- E.1.1 General Provisions Relating to NESHAP Subpart DDD [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- E.1.2 NESHAP Subpart DDD Requirements [40 CFR Part 63, Subpart DDD] [326 IAC 20-46]

Certification	46
Emergency Occurrence Report	47
Quarterly Report.....	49
Quarterly Deviation and Compliance Monitoring Report	50
Attachment A	40 CFR 63 - National Emission Standards for Hazardous Air Pollutants, Subpart DDD—National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary acoustic and thermal insulation manufacturing operation.

Source Address:	701 North Broadway Street, Huntington, Indiana 46750
General Source Phone Number:	260-356-2040
SIC Code:	3296
County Location:	Huntington
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) Two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, approved in 2011 for construction, each with a maximum heat input capacity of 21.60 MMBtu/hr and each with a maximum melt capacity of 5.50 tons per hour, equipped with low-NO_x burners, flue gas re-circulation, and a baghouse, identified as CE#1, and exhausting to a stack, identified as Stack 1. Under 40 CFR Part 63, Subpart DDD, these are considered affected new cupolas.
- (b) Two (2) short stack cupolas, identified as EU#1 and EU#2, constructed before 1960, equipped with a baghouse, identified as CE#1, exhausted to Stack #1, capacity: 5.0 tons of melt per hour and 1.5 tons of coke feed per hour, each. Under 40 CFR Part 63, Subpart DDD, these are considered affected existing cupolas.
- (c) Two (2) blowchambers, identified as EU#3 and EU#4, constructed before 1978, each equipped with a screenhouse, identified as CE#3 and CE#4, capacity: 4.0 tons of molten mineral feed per hour, each.
- (d) One (1) Cafco Process Line, identified as EU#41, originally constructed in 1980, with all particulate emissions exhausted to a baghouse, identified as CE#9, exhausted to Stack #9, with a capacity of 12.0 tons of blended product per hour, consisting of the following:
 - (1) Five (5) permanent hoppers, identified as EU#14 through EU#18.
 - (2) One (1) refeed hopper, identified as EU#27.
 - (3) One (1) live bottom hopper, identified as EU#19.
 - (4) One (1) transfer auger, identified as EU#23.
 - (5) One (1) mixer, identified as EU#24.

- (6) One (1) granulator, identified as EU#20.
- (7) One (1) automatic bagger, identified as EU#21, constructed in 2005, equipped with its own baghouse, identified as CE#10, with an outside exhaust.
- (8) One (1) dedust oil tank, identified as EU#34, constructed prior to 1980, exhausted to Stack #17, capacity: 7,000 gallons.
- (9) One (1) dedust oil tank, identified as EU#38, constructed in 1997, exhausted to Stack #21, capacity: 8,000 gallons.
- (10) Two (2) portable hoppers, identified as EU#25 and EU#26.
- (e) One (1) front end mineral wool bagger, identified as EU#7, constructed in 1987, equipped with a baghouse, identified as baghouse CE#5, exhausted to Stack #5, capacity: 5.0 tons of bagged mineral wool per hour.
- (f) One (1) batch blender, identified as EU#12, constructed in 1993, equipped with a baghouse, identified as CE#6, exhausted to Stack #6, capacity: 5.0 tons of blended product per hour.
- (g) One (1) ribbon blender, identified as EU#31, constructed in 1988, equipped with a baghouse, identified as CE#6, exhausted to Stack #6, capacity: 2.0 tons of dry powdered binders per year.
- (h) One (1) process line, identified as PMF line (EU#33), approved in 2010 for construction, including a PMF bagger, classifier and attrition mill, equipped with a baghouse, identified as CE#5, exhausted to Stack #5, capacity: 5.0 tons of bagged mineral wool per hour.

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

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

- (a) One (1) mineral wool baler, identified as EU#5, constructed in 2005, controlled by baghouse CE#5, exhausted to Stack #5, capacity: 12.0 tons of baled mineral wool per hour. [326 IAC 6-3-2]
- (b) One (1) mineral wool bin, identified as EU#8, constructed before 1985, equipped with a pneumatic conveyor that incorporates a totally enclosed air recycled system, capacity: 10.0 tons of mineral wool per hour. [326 IAC 6-3-2]
- (c) One (1) gypsum silo, identified as EU#9, constructed prior to 1980, equipped with a baghouse, identified as CE#8, exhausted to Stack #8, capacity: 54.0 tons of gypsum per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (d) One (1) chipped gypsum silo, identified as EU#10, constructed in 1991, equipped with a baghouse, identified as CE#8, exhausted to Stack #8, capacity: 54.0 tons of gypsum per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (e) One (1) cement silo, identified as EU#11, constructed in 1990, equipped with a baghouse, identified as CE#7, exhausted to Stack #7, capacity: 54.0 tons of Portland cement per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (f) One (1) slag cement silo, identified as EU#32, approved in 2010 for construction, equipped with a baghouse, identified as CE#11, exhausted to Stack #11, capacity: 54.0 tons of Portland cement per hour. [326 IAC 6-3-2] [326 IAC 2-2]

- (g) One (1) debaler, identified as EU#13, constructed in 1980, exhausted inside the building, capacity: 5.0 tons of mineral wool per hour.
- (h) One (1) raw material receiving yard, identified as EU#29, constructed prior to 1980, capacity: 216 tons of rock, slag and coke per hour, total.
- (i) One (1) batching station, identified as EU#30, constructed prior to 1980, capacity: 14.4 tons of rock and coke per hour, total.
- (j) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, with a total heat input capacity of 4.38 million British thermal units per hour (MMBtu/hr). There are no boilers at this source.
- (k) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. This is an affected facility under 40 CFR 63, Subpart CCCCCC;
- (l) One (1) PEG400 VOC tank, identified as EU#35, constructed in 1990, capacity: 8,000 gallons.
- (m) Two (2) two maintenance parts washing tanks used for degreasing small parts.
- (n) One (1) welding process, with two welding stations consisting of metal-cored submerged arc (SAW) welding with flux.

NOTE: The flux material does not contain any VOC or HAPs.
- (o) One (1) black ink jet printer, to apply identification number to bags of finished product prior to shipping.
- (p) Noncontact cooling tower systems with a forced and induced draft cooling tower system not regulated under a NESHAP.
- (q) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (r) Heat exchanger cleaning and repair.
- (s) Process vessel degassing and cleaning to prepare for internal repairs.
- (t) A laboratory as defined in 326 IAC 2-7-1(21)(H).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T069-31651-00021, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

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

- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
 - (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

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

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

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

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

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

- (a) All terms and conditions of permits established prior to T069-31651-00021 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

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

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

- (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

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

and

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

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

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

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

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

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

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

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

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

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

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

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

Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

- (b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

- (c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

- (I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:
 - (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
 - (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;

- (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
 - (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
 - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
 - (e) The Permittee shall record the reasonable response steps taken.
- (II)
 - (a) *CAM Response to excursions or exceedances.*
 - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.
 - (2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
 - (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

- (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
- (d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
 - (1) Failed to address the cause of the control device performance problems;
or
 - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (h) *CAM recordkeeping requirements.*
 - (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.
 - (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

In accordance with the compliance schedule specified in 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:
- (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the Part 70 Operating Permit.
- Records of required monitoring information include the following:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
 - (BB) The dates analyses were performed.
 - (CC) The company or entity that performed the analyses.
 - (DD) The analytical techniques or methods used.
 - (EE) The results of such analyses.
 - (FF) The operating conditions as existing at the time of sampling or measurement.

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

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

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[40 CFR 64][326 IAC 3-8]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.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 applicable standards for recycling and emissions reduction.

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) Two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, approved in 2011 for construction, each with a maximum heat input capacity of 21.60 MMBtu/hr and each with a maximum melt capacity of 5.50 tons per hour, equipped with low-NO_x burners, flue gas re-circulation, and a shared baghouse, identified as CE#1, and exhausting to a shared stack, identified as Stack 1. Under 40 CFR Part 63, Subpart DDD, these are considered affected new cupolas.
- (b) Two (2) short stack cupolas, identified as EU#1 and EU#2, constructed before 1960, equipped with a shared baghouse, identified as CE#1, exhausted to shared Stack #1, capacity: 5.0 tons of melt per hour and 1.5 tons of coke feed per hour, each. Under 40 CFR Part 63, Subpart DDD, these are considered affected existing cupolas.

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

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

D.1.1 Prevention of Significant Deterioration (PSD) SO₂ and NO_x Minor Limits [326 IAC 2-2]

- (a) Pursuant 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the natural gas-fired mineral wool melters (EU-1A and EU-2A), the Permittee shall comply with the following conditions:
 - (1) PM emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 1.10 lb/hr, combined.
 - (2) PM₁₀ emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 3.34 lb/hr, combined.
 - (3) PM_{2.5} emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.23 lb/hr, combined.

Compliance with these limits will ensure that the emissions increase from the natural gas-fired mineral wool melters shall be less than twenty-five (25) tons per year of PM, fifteen (15) tons per year of PM₁₀, and ten (10) tons per year of PM_{2.5}. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to the natural gas-fired mineral wool melters.

- (b) Pursuant 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the natural gas-fired mineral wool melters (EU-1A and EU-2A), the Permittee shall comply with the following conditions:
 - (1) The SO₂ emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 7.33 pounds per ton of material feed, each.
 - (2) The NO_x emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.28 pounds per ton of material feed, each.
 - (3) The H₂S emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.62 pounds per ton of material feed, each.
 - (4) The material input to the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 77,500.0 tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.

- (5) Not later than one hundred eighty (180) days after startup of the second of the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, the Permittee shall decommission and permanently shutdown the two (2) short stack cupolas, identified as EU#1 and EU#2.

Compliance with these limits will ensure that the net emissions increase from the natural gas-fired mineral wool melters shall be less than forty (40) tons per year of SO₂, forty (40) tons per year of NO_x, and ten (10) tons per year of H₂S. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to the natural gas-fired mineral wool melters.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.3 Particulate Control [326 IAC 2-7-6(6)]

In order to comply with Conditions D.1.1, the natural gas-fired mineral wool melter, identified as EU-1A, or the natural gas-fired mineral wool melter, identified as EU-2A, the Permittee shall comply with the following:

- (a) The baghouse identified as CE#1, for particulate control shall be in operation and control emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, at all times that either melter is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

- (a) In order to demonstrate the compliance status with Conditions D.1.1, the Permittee shall perform the compliance stack test of PM, PM₁₀ and PM_{2.5} for baghouse CE#1, which controls the natural gas-fired melter, identified as EU-1A within 180 days after the start up of the natural gas-fired melter, identified as EU-1A.
- (b) In order to demonstrate the compliance status with Conditions D.1.1, the Permittee shall perform the compliance stack test of PM, PM₁₀ and PM_{2.5} for baghouse CE#1, which controls the natural gas-fired melter, identified as EU-2A within 180 days after the start up of the natural gas-fired melter, identified as EU-2A.
- (c) In order to demonstrate the compliance status with Conditions D.1.1, the Permittee shall perform stack test of SO₂, NO_x, and H₂S for baghouse CE#1, which controls the natural gas-fired melter, identified as EU-1A within 180 days after the start up of the natural gas-fired melter, identified as EU-1A.
- (c) In order to demonstrate the compliance status with Conditions D.1.1, the Permittee shall perform stack test of SO₂, NO_x, and H₂S for baghouse CE#1, which controls the natural gas-fired melter, identified as EU-2A within 180 days after the start up of the natural gas-fired melter, identified as EU-2A.

These tests shall be conducted utilizing methods approved by the Commissioner. Each of these tests shall be repeated at least five (5) years from the date of the most recent valid compliance demonstration. PM₁₀ and PM_{2.5} includes filterable and condensable PM. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

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

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the one (1) baghouse, identified as CE#1 stack exhaust shall be performed once per day during normal daylight operations when either EU-1A or EU-2A are in operation. 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. Section C-Response to Excursions or Exceedences contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps in shall be considered a deviation from this permit.

D.1.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Upon startup of the natural gas-fired mineral wool melter, identified as EU-1A, or the natural gas-fired mineral wool melter, identified as EU-2A, the Permittee shall comply with the following:

- (a) The Permittee shall record the pressure drop across the one (1) baghouse, identified as CE#1, used in conjunction with the natural gas-fired mineral wool melter, identified as EU-1A and EU-2A, at least once per day when either melter is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.2 to 6.0 inches of water for CE#1, or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedences contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.7 Broken or Failed Bag Detection

Upon startup of the natural gas-fired mineral wool melter, identified as EU-1A, or the natural gas-fired mineral wool melter, identified as EU-2A, the Permittee shall comply with the following:

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately

until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.1.8 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1(b), the Permittee shall maintain records of the material input to the natural gas-fired melters, identified as EU-1A and EU-2A.
- (b) To document the compliance status with Condition D.3.6, the Permittee shall maintain a daily record of visible emission notations of the one (1) baghouse, identified as CE#1, stack 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., neither melter was in operation that day).
- (c) To document the compliance status with Condition D.3.7, the Permittee shall maintain a daily record of the pressure drop across the one (1) baghouse, identified as CE#1. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., neither melter was in operation that day).
- (d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.1.9 Reporting Requirements

A quarterly summary of the information to document the compliance status with the limit specified in Condition D.1.1(g) - Prevention of Significant Deterioration (PSD) Minor Limitations shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (c) Two (2) blowchambers, identified as EU#3 and EU#4, constructed before 1978, each equipped with a screenhouse, identified as CE#3 and CE#4, capacity: 4.0 tons of molten mineral feed per hour, each.

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

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

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the two (2) blowchambers, identified as EU#3 and EU#4, shall not exceed 10.4 pounds per hour, each, when operating at a process weight rate of 4.0 tons per hour, each.

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

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

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

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

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

D.2.3 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the two (2) screenhouses, identified as CE#3 and CE#4, stack exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C-Response to Excursions or Exceedences contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps in shall be considered a deviation from this permit.

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

D.2.4 Record Keeping Requirements

- (a) To document the compliance status with Condition D.2.3, the Permittee shall maintain a daily record of visible emission notations of the two (2) screenhouses, identified as CE#3 and CE#4, stack exhausts. 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 blowchambers did not operate that day).

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

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Cafco Process Line

- (c) One (1) Cafco Process Line, identified as EU#41, originally constructed in 1980, with all particulate emissions exhausted to a baghouse, identified as CE#9, exhausted to Stack #9, with a capacity of 12.0 tons of blended product per hour, consisting of the following:
- (1) Five (5) permanent hoppers, identified as EU#14 through EU#18.
 - (2) One (1) refeed hopper, identified as EU#27.
 - (3) One (1) live bottom hopper, identified as EU#19.
 - (4) One (1) transfer auger, identified as EU#23.
 - (5) One (1) mixer, identified as EU#24.
 - (6) One (1) granulator, identified as EU#20.
 - (7) One (1) automatic bagger, identified as EU#21, constructed in 2005, equipped with its own baghouse, identified as CE#10, with an outside exhaust.
 - (8) One (1) dedust oil tank, identified as EU#34, constructed prior to 1980, exhausted to Stack #17, capacity: 7,000 gallons.
 - (9) One (1) dedust oil tank, identified as EU#38, constructed in 1997, exhausted to Stack #21, capacity: 8,000 gallons.
 - (10) Two (2) portable hoppers, identified as EU#25 and EU#26.

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

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

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

The potential to emit PM from the facilities at the one (1) Cafco Process Line exhausting to the one (1) baghouse, identified as CE#9, and Stack #9, shall be less than 5.2 pounds per hour of PM and 2.92 pounds per hour of PM₁₀. This will limit the potential to emit PM and PM₁₀ from the 1980 modification to less than twenty-five (25) and fifteen (15) tons per year, respectively, and render 326 IAC 2-2, PSD, not applicable.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the Cafco Process Line, identified as EU#41, shall not exceed 21.7 pounds per hour when operating at a process weight rate of 12.0 tons per hour.

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

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

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

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the one (1) Cafco Process Line, identified as EU#41, and the one (1) baghouse, identified as CE#9. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.4 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.3.1 and D.3.2, the baghouse identified as CE#9, for particulate control shall be in operation and control emissions from the Cafco Process Line, identified as EU#41, at all times that the Cafco Process Line is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate the compliance status with Condition D.3.1, a compliance stack test of PM, PM₁₀ and PM_{2.5} for baghouse CE#9, controlling Cafco Process Line shall be performed at least every five (5) years from the date of the most recent valid compliance demonstration.

These tests shall be conducted utilizing methods approved by the Commissioner. These tests shall be repeated at least five (5) years from the date of the most recent valid compliance demonstration. PM₁₀ and PM_{2.5} includes filterable and condensable PM. Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.3.6 Visible Emissions Notations [40 CFR 64]

- (a) Visible emission notations of the one (1) baghouse, identified as CE#9 stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C-Response to Excursions or Exceedences contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps in shall be considered a deviation from this permit.

D.3.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

- (a) The Permittee shall record the pressure drop across the one (1) baghouse, identified as CE#9, used in conjunction with the Cafco Process Line, identified as EU#41, at least

once per day when the Cafco Process Line, identified as EU#41, is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.2 and 6.0 inches of water for CE#9, or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.3.8 Broken or Failed Bag Detection

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

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

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

D.3.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.6, the Permittee shall maintain a daily record of visible emission notations of the one (1) baghouse, identified as CE#9, stack 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 Cafco Process Line did not operate that day).
- (b) To document the compliance status with Condition D.3.7, the Permittee shall maintain a daily record of the pressure drop across the one (1) baghouse, identified as CE#9, controlling the Cafco Process Line, identified as EU#41. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the Cafco Process Line did not operate that day).
- (c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Bagging and Blending

- (d) One (1) front end mineral wool bagger, identified as EU#7, constructed in 1987, equipped with a baghouse, identified as CE#5, exhausted to Stack #5, capacity: 5.0 tons of bagged mineral wool per hour.
- (e) One (1) batch blender, identified as EU#12, constructed in 1993, equipped with a baghouse, identified as CE#6, exhausted to Stack #6, capacity: 5.0 tons of blended product per hour.
- (f) One (1) ribbon blender, identified as EU#31, constructed in 1988, equipped with a baghouse, identified as CE#6, exhausted to Stack #6, capacity: 2.0 tons of dry powdered binders per year.
- (g) One (1) process line, identified as PMF line (EU#33), permitted in 2010 for construction, including a PMF bagger, classifier and attrition mill, equipped with a baghouse, identified as baghouse CE#5, exhausted to Stack #5, capacity: 5.0 tons of bagged mineral wool per hour.

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

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

D.4.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

- (a) The potential to emit PM₁₀ from the one (1) front end mineral wool bagger, identified as EU#7, limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀. This will limit the potential to emit PM to less than twenty-five (25) tons per year and PM₁₀ to less than fifteen (15) tons per year from the front end mineral wool bagger, identified as EU#7, and render 326 IAC 2-2, PSD, not applicable.
- (b) The potential to emit PM₁₀ from the one (1) batch blender, identified as EU#12, shall be less than 3.42 pounds per hour. This will limit the potential to emit PM₁₀ to less than fifteen (15) tons per year from the batch blender, identified as EU#12, and render 326 IAC 2-2, PSD, not applicable.
- (c) The potential to emit PM₁₀ from the PMF Line (EU#33) shall be less than 3.42 pounds per hour. This will limit the potential to emit PM₁₀ to less than fifteen (15) tons per year from the PMF Line and render 326 IAC 2-2, PSD, not applicable.

D.4.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) front end mineral wool bagger, identified as EU#7, shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) batch blender, identified as EU#12, shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) ribbon blender, identified as EU#31, shall not exceed 6.52 pounds per hour when operating at a process weight rate of 2.0 tons per hour.

- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the PMF Line (EU#33), shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.

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

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

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

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for one (1) front end mineral wool bagger, identified as EU#7, the one (1) batch blender, identified as EU#12, the PMF Line, and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.4.4 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.4.1(a) and (c), the baghouse identified as baghouse CE#5 for particulate control shall be in operation and control emissions from the PMF Line (EU#33), and the front end mineral wool bagger, identified as EU#7, at all times that the PMF Line or mineral wool bagger EU#5 is in operation.
- (b) In order to comply with Conditions D.4.1(b), the baghouse identified as CE#6, for particulate control shall be in operation and control emissions from the one (1) batch blender, identified as EU#12, at all times that the batch blender is in operation.
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.4.5 Visible Emissions Notations

- (a) Visible emission notations of the two (2) baghouses, identified as baghouses CE#5 and CE#6, stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response.

Section C-Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps in shall be considered a deviation from this permit.

D.4.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the pressure drop across the baghouse, identified as CE #5 controlling the front end mineral wool bagger (EU #7), the PMF Line (EU #33), and the mineral wool baler (EU #5) at least once per day when the front end mineral wool bagger (EU #7), the PMF Line (EU #33), and the mineral wool baler (EU #5) are in operation and exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.1 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C-Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the baghouse, identified as CE #6 controlling the batch blender (EU #12) and the ribbon blender (EU #31), at least once per day when the batch blender (EU #12) and the ribbon blender (EU #31) are in operation and exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.1 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.4.7 Broken or Failed Bag Detection

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

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

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

D.4.8 Record Keeping Requirements

- (a) To document the compliance status with Condition D.4.5, the Permittee shall maintain a daily record of visible emission notations of the two (2) baghouses, identified as CE#5

and CE#6, stack exhausts. 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 bagger and blender did not operate that day).

- (b) To document the compliance status with Condition D.4.6, the Permittee shall maintain a daily record of the pressure drop across the baghouses controlling the PMF Line (EU#33), one (1) front end mineral wool bagger, identified as EU#7, and the one (1) batch blender, identified as EU#12. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the bagger and blender did not operate that day).
- (c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

- (a) One (1) mineral wool baler, identified as EU#5, constructed in 2005, controlled by baghouse CE#5, exhausted to Stack #5, capacity: 12.0 tons of baled mineral wool per hour. [326 IAC 6-3-2]
- (b) One (1) mineral wool bin, identified as EU#8, constructed in 1983 or 1984, equipped with a pneumatic conveyor that incorporates a totally enclosed air recycled system, capacity: 10.0 tons of mineral wool per hour. [326 IAC 6-3-2]
- (c) One (1) gypsum silo, identified as EU#9, constructed prior to 1980, equipped with a baghouse, identified as CE#8, exhausted to Stack #8, capacity: 54.0 tons of gypsum per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (d) One (1) chipped gypsum silo, identified as EU#10, constructed in 1991, equipped with a baghouse, identified as CE#8, exhausted to Stack #8, capacity: 54.0 tons of gypsum per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (e) One (1) cement silo, identified as EU#11, constructed in 1990, equipped with a baghouse, identified as CE#7, exhausted to Stack #7, capacity: 54.0 tons of Portland cement per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (f) One (1) slag cement silo, identified as EU#32, permitted in 2010, equipped with a baghouse, identified as CE#11, exhausted to Stack #11, capacity: 54.0 tons of Portland cement per hour. [326 IAC 6-3-2] [326 IAC 2-2]

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

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

D.5.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

- (a) The potential to emit from the one (1) gypsum silo, identified as EU#9, shall be limited to less than 5.13 pounds per hour of PM and 3.15 pounds per hour of PM₁₀. This will limit the potential to emit PM and PM₁₀ from the 1978 and 1979 modification to less than twenty-five (25) and fifteen (15) tons per year, respectively, and render 326 IAC 2-2, PSD, not applicable.
- (b) The potential to emit from the one (1) cement silo, identified as EU#11, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀. This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) cement silo, identified as EU#11, and render 326 IAC 2-2, PSD, not applicable.
- (c) The potential to emit from the one (1) chipped gypsum silo, identified as EU#10, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀. This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) chipped gypsum silo, identified as EU#10, and render 326 IAC 2-2, PSD, not applicable.
- (d) The potential to emit from the one (1) slag cement silo, identified as EU#32, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀. This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) slag cement silo, identified as EU#32, and render 326 IAC 2-2, PSD, not applicable.

D.5.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) mineral wool baler, identified as EU#5, shall not exceed 21.7 pounds per hour when operating at a process weight rate of 12.0 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) mineral wool bin, identified as EU#8, shall not exceed 19.2 pounds per hour when operating at a process weight rate of 10.0 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) gypsum silo, identified as EU#9, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) chipped gypsum silo, identified as EU#10, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) cement silo, identified as EU#11, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.
- (f) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) cement silo, identified as EU#32, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.

The pounds per hour limitations were calculated with the following equations:

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

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

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the one (1) gypsum silo, identified as EU#9, the one (1) cement silo, identified as EU#11, the one (1) chipped gypsum silo, identified as EU#10, and one (1) slag cement silo, identified as EU#32, and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.4 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Condition D.5.1(a), the filter identified as CE#8, for particulate control shall be in operation and control emissions from the one (1) gypsum silo, identified as EU#9, at all times that the gypsum silo is being loaded.
- (b) In order to comply with Conditions D.5.1(b), the filter identified as CE#7, for particulate control shall be in operation and control emissions from the one (1) cement silo, identified as EU#11, at all times that the cement silo is being loaded.
- (c) In order to comply with Conditions D.5.1(c), the baghouse identified as CE#8, for particulate control shall be in operation and control emissions from the one (1) chipped gypsum silo, identified as EU#10, at all times that the chipped gypsum silo is being loaded.
- (d) In order to comply with Conditions D.5.1(d), the baghouse identified as CE#11, for particulate control shall be in operation and control emissions from the one (1) slag cement silo, identified as EU#32, at all times that the slag cement silo is being loaded.
- (e) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

SECTION D.6

FACILITY OPERATION CONDITIONS

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

- (a) Two (2) maintenance part washers for degreasing small parts.

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

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, for each of the part washers, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant 326 IAC 8-3-5(a), the owner or operator shall ensure that the following control equipment requirements are met for each of the part washers:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5(b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent

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

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant 326 IAC 8-3-5(b), the owner or operator shall ensure that the following operating requirements are met for each of the parts washers:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

- (a) Two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, approved in 2011 for construction, each with a maximum heat input capacity of 21.60 MMBtu/hr and each with a maximum melt capacity of 5.50 tons per hour, equipped with low-NO_x burners, flue gas re-circulation, and a baghouse, identified as CE#1, and exhausting to a stack, identified as Stack 1. Under 40 CFR Part 63, Subpart DDD, these are considered affected new cupolas.
- (b) Two (2) short stack cupolas, identified as EU#1 and EU#2, constructed before 1960, equipped with a baghouse, identified as CE#1, exhausted to Stack #1, capacity: 5.0 tons of melt per hour and 1.5 tons of coke feed per hour, each. Under 40 CFR Part 63, Subpart DDD, these are considered affected existing cupolas.

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

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

E.1.1 General Provisions Relating to NESHAP Subpart DDD [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.1194, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the two (2) cupolas, identified as EU#1 and EU#2, as specified in Table 1 of 40 CFR Part 63, Subpart DDD in accordance with schedule in 40 CFR 63, Subpart DDD.

E.1.2 NESHAP Subpart DDD Requirements [40 CFR Part 63, Subpart DDD] [326 IAC 20-46]

Pursuant to CFR Part 63, Subpart DDD, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart DDD [National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production], which are incorporated by reference as 326 IAC 20-46 for the two (2) cupolas, identified as EU#1 and EU#2, and the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, as specified as follows.

- (1) 40 CFR 63.1175
- (2) 40 CFR 63.1176
- (3) 40 CFR 63.1177
- (4) 40 CFR 63.1178 (a)(1), (a)(2)(i), and (b)
- (5) 40 CFR 63.1180 (a)(2), (b), (c), and (d)
- (6) 40 CFR 63.1181
- (7) 40 CFR 63.1182
- (8) 40 CFR 63.1184
- (9) 40 CFR 63.1185
- (10) 40 CFR 63.1186
- (11) 40 CFR 63.1187
- (12) 40 CFR 63.1188 (a), (b), (c), (d), (f), (g), (h), and (i)
- (13) 40 CFR 63.1189 (a), (b), (c), (d), (e), (f), and (g)
- (14) 40 CFR 63.1190 (a) and (b)
- (15) 40 CFR 63.1191 (a)(2), (b), (d), and (e)
- (16) 40 CFR 63.1192
- (17) 40 CFR 63.1193
- (18) 40 CFR 63.1194
- (19) 40 CFR 63.1195
- (20) Table 1 to Subpart DDD of Part 63 - Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart DDD of Part 63 (Applicable Portions)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Source Address: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Permit No.: T069-31651-00021

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Source Address: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Permit No.: T069-31651-00021

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Source Address: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Permit No.: T069-31651-00021
Facility: Natural gas-fired mineral wool melters, identified as EU-1A and EU-2A.

Parameter: Material input to the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A.

Limit: Material input to the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 77,500.0 tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: U.S. Mineral Products Company (d/b/a Isolatek International)
 Source Address: 701 North Broadway Street, Huntington, Indiana 46750
 Part 70 Permit No.: T069-31651-00021

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

U.S. Mineral Products Company (d/b/a Isolatek International)
Part 70 Operating Permit Renewal No. T 069-31651-00021

Attachment A

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart DDD—National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production

Source: 64 FR 29503, June 1, 1999, unless otherwise noted.

§ 63.1175 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants emitted from existing, new, and reconstructed cupolas and curing ovens at facilities that produce mineral wool.

§ 63.1176 Where can I find definitions of key words used in this subpart?

The definitions of key words used in this subpart are in the Clean Air Act (Act), in §63.2 of the general provisions in subpart A of this part, and in §63.1196 of this subpart.

§ 63.1177 Am I subject to this subpart?

You are subject to this subpart if you own or operate an existing, new, or reconstructed mineral wool production facility that is located at a plant site that is a major source of hazardous air pollutant (HAP) emissions, meaning the plant emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAPs at a rate of 22.68 megagrams (25 tons) or more per year.

Standards

§ 63.1178 For cupolas, what standards must I meet?

(a) You must control emissions from each cupola as follows:

(1) Limit emissions of particulate matter (PM) from each existing, new, or reconstructed cupola to 0.05 kilograms (kg) of PM per megagram (MG) (0.10 pound [lb] of PM per ton) of melt or less.

(2) Limit emissions of carbon monoxide (CO) from each new or reconstructed cupola to either of the following:

(i) 0.05 kg of CO per MG (0.10 lb of CO per ton) of melt or less.

(ii) A reduction of uncontrolled CO emissions by at least 99 percent.

(b) You must meet the following operating limits for each cupola:

(1) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart.

(2) When the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period, develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of §64.8(b)–(d) of 40 CFR part 64.

(3) Additionally, for each new or reconstructed cupola, maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

§ 63.1179 For curing ovens, what standards must I meet?

(a) You must control emissions from each existing, new, or reconstructed curing oven by limiting emissions of formaldehyde to either of the following:

(1) 0.03 kg of formaldehyde per MG (0.06 lb of formaldehyde per ton) of melt or less.

(2) A reduction of uncontrolled formaldehyde emissions by at least 80 percent.

(b) You must meet the following operating limits for each curing oven:

(1) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.

(2) Maintain the operating temperature of each incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

§ 63.1180 When must I meet these standards?

(a) *Existing cupolas and curing ovens.* You must install any control devices and monitoring equipment necessary to meet the standards in this subpart, complete performance testing, and demonstrate compliance with all requirements of this subpart no later than the following:

(1) June 2, 2002; or

(2) June 3, 2003 if you apply for and receive a one-year extension under section 112(i)(3)(B) of the Act.

(b) *New and reconstructed cupolas and curing ovens.* You must install any control devices or monitoring equipment necessary to meet the standards in this subpart, complete performance testing, and demonstrate compliance with all requirements of this subpart by the dates in §63.7 of the general provisions in subpart A of this part.

(c) You must comply with the standards in §§63.1178 and 63.1179 of this subpart on and after the dates in paragraphs (a) and (b) of this section.

(d) You must comply with these standards at all times except during periods of startup, shutdown, or malfunction.

Compliance With Standards

§ 63.1181 How do I comply with the particulate matter standards for existing, new, and reconstructed cupolas?

To comply with the PM standards, you must meet all of the following:

- (a) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter.
- (b) Do a performance test as specified in §63.1188 of this subpart and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.
- (c) Begin corrective actions specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart within one hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.
- (d) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40 CFR 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period.

§ 63.1182 How do I comply with the carbon monoxide standards for new and reconstructed cupolas?

To comply with the CO standards, you must meet all of the following:

- (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.
- (b) Do a performance test as specified in §63.1188 of this subpart and show compliance with the CO emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in §63.1185(a) of this subpart.
- (c) Following the performance test, measure and record the average operating temperature of the incinerator as specified in §63.1185(b) of this subpart.
- (d) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
- (e) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart.

§ 63.1183 How do I comply with the formaldehyde standards for existing, new, and reconstructed curing ovens?

To comply with the formaldehyde standards, you must meet all of the following:

- (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.

(b) Do a performance test as specified in §63.1188 of this subpart while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. Show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in §63.1185(a) of this subpart.

(c) During the performance test that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification.

(d) Following the performance test, monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.

(e) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.

(f) Following the performance test, measure and record the average operating temperature of the incinerator as specified in §63.1185(b) of this subpart.

(g) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

(h) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart.

(i) With prior approval from the Administrator, you may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information:

(1) The purpose of the experimental run.

(2) The affected production process.

(3) How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are.

(4) The duration of the experimental run.

(5) The date and time of the experimental run.

(6) A description of any emissions testing to be done during the experimental run.

Additional Monitoring Information

§ 63.1184 What do I need to know about the design specifications, installation, and operation of a bag leak detection system?

A bag leak detection system must meet the following requirements:

- (a) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (b) The sensor on the bag leak detection system must provide output of relative PM emissions.
- (c) The bag leak detection system must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.
- (d) The alarm must be located in an area where appropriate plant personnel will be able to hear it.
- (e) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.
- (f) Each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained so that it follows EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, operated, adjusted, and maintained so that they follow the manufacturer's written specifications and recommendations.
- (g) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:
 - (1) Adjust the range and the averaging period of the device.
 - (2) Establish the alarm set points and the alarm delay time.
- (h) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations, maintenance, and monitoring plan required by §63.1187 of this subpart. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless a responsible official as defined in §63.2 of the general provisions in subpart A of this part certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.

§ 63.1185 How do I establish the average operating temperature of an incinerator?

- (a) During the performance test, you must establish the average operating temperature of an incinerator as follows:
 - (1) Continuously measure the operating temperature of the incinerator.
 - (2) Determine and record the average temperatures in consecutive 15-minute blocks.

(3) Determine and record the arithmetic average of the recorded average temperatures measured in consecutive 15-minute blocks for each of the one-hour performance test runs.

(4) Determine and record the arithmetic average of the three one-hour average temperatures during the performance test runs. The average of the three one-hour performance test runs establishes the temperature level to use to monitor compliance.

(b) To comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, you must measure and record the average operating temperature of the incinerator as required by §§63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of this section.

§ 63.1186 How may I change the compliance levels of monitored parameters?

You may change control device and process operating parameter levels established during performance tests and used to monitor compliance if you do the following:

(a) You must notify the Administrator of your desire to expand the range of a control device or process operating parameter level.

(b) Upon approval from the Administrator, you must conduct additional performance tests at the proposed new control device or process operating parameter levels. Before operating at these levels, the performance test results must verify that, at the new levels, you comply with the emission limits in §§63.1178 and 63.1179 of this subpart.

§ 63.1187 What do I need to know about operations, maintenance, and monitoring plans?

(a) An operations, maintenance, and monitoring plan must be submitted to the Administrator for review and approval as part of your application for the title V permit.

(b) The operations, maintenance, and monitoring plan must include the following:

(1) Process and control device parameters you will monitor to determine compliance, along with established operating levels or ranges for each process or control device.

(2) A monitoring schedule.

(3) Procedures for properly operating and maintaining control devices used to meet the standards in §§63.1178 and 63.1179 of this subpart. These procedures must include an inspection of each incinerator at least once per year. At a minimum, you must do the following as part of an incinerator inspection:

(i) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.

(ii) Ensure proper adjustment of combustion air, and adjust if necessary.

(iii) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.

(iv) Inspect dampers, fans, and blowers for proper operation.

- (v) Inspect motors for proper operation.
 - (vi) Inspect, when possible, combustion chamber refractory lining. Clean, and repair or replace lining if necessary.
 - (vii) Inspect incinerator shell for proper sealing, corrosion, and/or hot spots.
 - (viii) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments.
 - (ix) Generally observe whether the equipment is maintained in good operating condition.
 - (x) Complete all necessary repairs as soon as practicable.
- (4) Procedures for keeping records to document compliance.
- (5) Corrective actions you will take if process or control device parameters vary from the levels established during performance testing. For bag leak detection system alarms, example corrective actions that may be included in the operations, maintenance, and monitoring plan include:
- (i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
 - (ii) Sealing off defective bags or filter media.
 - (iii) Replacing defective bags or filter media, or otherwise repairing the control device.
 - (iv) Sealing off a defective fabric filter compartment.
 - (v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
 - (vi) Shutting down the process producing the particulate emissions.

Performance Tests and Methods

§ 63.1188 What performance test requirements must I meet?

You must meet the following performance test requirements:

- (a) All monitoring systems and equipment must be installed, operational, and properly calibrated before the performance tests.
- (b) Do a performance test, consisting of three test runs, for each cupola and curing oven subject to this subpart at the maximum production rate to demonstrate compliance with each of the applicable emission limits in §§63.1178 and 63.1179 of this subpart.
- (c) Measure emissions of PM from each existing cupola.
- (d) Measure emissions of PM and CO from each new or reconstructed cupola.

- (e) Measure emissions of formaldehyde from each existing, new or reconstructed curing oven.
- (f) Measure emissions at the outlet of the control device if complying with a numerical emission limit for PM, CO, or formaldehyde, or at the inlet and outlet of the control device if complying with a percent reduction emission limit for CO or formaldehyde.
- (g) To determine the average melt rate, measure and record the amount of raw materials, excluding coke, charged into and melted in each cupola during each performance test run. Determine and record the average hourly melt rate for each performance test run. Determine and record the arithmetic average of the average hourly melt rates associated with the three performance test runs. The average hourly melt rate of the three performance test runs is used to determine compliance with the applicable emission limits.
- (h) Compute and record the average emissions of the three performance test runs and use the equations in §63.1190 of this subpart to determine compliance with the applicable emission limits.
- (i) Comply with control device and process operating parameter monitoring requirements for performance testing as specified in this subpart.

§ 63.1189 What test methods do I use?

You must use the following test methods to determine compliance with the applicable emission limits:

- (a) Method 1 in appendix A to part 60 of this chapter for the selection of the sampling port locations and number of sampling ports.
- (b) Method 2 in appendix A to part 60 of this chapter for stack gas velocity and volumetric flow rate.
- (c) Method 3 or 3A in appendix A to part 60 of this chapter for oxygen and carbon dioxide for diluent measurements needed to correct the concentration measurements to a standard basis.
- (d) Method 4 in appendix A to part 60 of this chapter for moisture content of the stack gas.
- (e) Method 5 in appendix A to part 60 of this chapter for the concentration of PM. Each PM test run must consist of a minimum run time of three hours and a minimum sample volume of 3.75 dscm (135 dscf).
- (f) Method 10 in appendix A to part 60 of this chapter for the concentration of CO, using the continuous sampling option described in section 7.1.1 of the method. Each CO test run must consist of a minimum run time of one hour.
- (g) Method 318 in appendix A to this part for the concentration of formaldehyde or CO.
- (h) Method to determine the free-formaldehyde content of each resin lot in appendix A of this subpart.

§ 63.1190 How do I determine compliance?

- (a) Using the results of the performance tests, you must use the following equation to determine compliance with the PM emission limit:

$$E = \frac{C \times O \times K_1}{P}$$

where:

E = Emission rate of PM, kg/Mg (lb/ton) of melt.

C = Concentration of PM, g/dscm (gr/dscf).

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K₅₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).

P = Average melt rate, Mg/hr (ton/hr).

(b) Using the results of the performance tests, you must use the following equation to determine compliance with the CO and formaldehyde numerical emission limits:

$$E = \frac{C \times MW \times O \times K_1 \times K_2}{K_3 \times P \times 10^6}$$

where:

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.

C = Measured volume fraction of pollutant, ppm.

MW = Molecular weight of measured pollutant, g/g-mole:

CO = 28.01, Formaldehyde = 30.03.

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).

K₂ = Conversion factor, 1,000 L/m³ (28.3 L/ft³).

K₃ = Conversion factor, 24.45 L/g-mole.

P = Average melt rate, Mg/hr (ton/hr).

(c) Using the results of the performance tests, you must use the following equation to determine compliance with the CO and formaldehyde percent reduction performance standards:

$$\%R = \frac{L_i - L_o}{L_i} \times 100$$

where:

%R = Percent reduction, or collection efficiency of the control device.

L_i = Inlet loading of pollutant, kg/Mg (lb/ton).

L_o = Outlet loading of pollutant, kg/Mg (lb/ton).

Notification, Recordkeeping, and Reporting

§ 63.1191 What notifications must I submit?

You must submit written notifications to the Administrator as required by §63.9(b)–(h) of the general provisions in subpart A of this part. These notifications include, but are not limited to, the following:

(a) Notification that the following types of sources are subject to the standard:

(1) An area source that increases its emissions so that it becomes a major source.

(2) A source that has an initial startup before the effective date of the standard.

(3) A new or reconstructed source that has an initial startup after the effective date of the standard and doesn't require an application for approval of construction or reconstruction under §63.5(d) of the general provisions in subpart A of this part.

(b) Notification of intention to construct a new major source or reconstruct a major source where the initial startup of the new or reconstructed source occurs after the effective date of the standard and an application for approval of construction or reconstruction under §63.5(d) of the general provisions in subpart A of this part is required.

(c) Notification of special compliance obligations for a new source that is subject to special compliance requirements in §63.6(b)(3) and (4) of the general provisions in subpart A of this part.

(d) Notification of a performance test at least 60 calendar days before the performance test is scheduled to begin.

(e) Notification of compliance status.

§ 63.1192 What recordkeeping requirements must I meet?

You must meet the following recordkeeping requirements:

(a) Maintain files of all information required by §63.10(b) of the general provisions in subpart A of this part, including all notifications and reports.

(b) Maintain records of the following information also:

(1) Cupola production (melt) rate (Mg/hr (tons/hr) of melt).

(2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

(3) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products.

(4) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.

(c) Retain each record for at least five years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.

(d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.

(e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.

§ 63.1193 What reports must I submit?

You must prepare and submit reports to the Administrator as required by this subpart and §63.10 of the general provisions in subpart A of this part. These reports include, but are not limited to, the following:

(a) A performance test report, as required by §63.10(d)(2) of the general provisions in subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.

(b) A startup, shutdown, and malfunction plan, as described in §63.6(e)(3) of the general provisions in subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the emission standards. In addition to the information required by §63.6(e)(3), your plan must include the following:

(1) Procedures to determine and record what caused the malfunction and when it began and ended.

(2) Corrective actions you will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(3) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(c) A report of each event as required by §63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in §63.6(e)(3) of the general provisions in subpart A of this part.

(d) An operations, maintenance, and monitoring plan as specified in §63.1187 of this subpart.

(e) A semiannual report as required by §63.10(e)(3) of the general provisions in subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in §63.10(c) of the general provisions, as well as the relevant records required by §63.1192(b) of this subpart.

(f) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by §63.10(e)(3)(v) of the general provisions in subpart A of this part if no deviations have occurred.

Other Requirements and Information

§ 63.1194 Which general provisions apply?

The general provisions in subpart A of this part define requirements applicable to all owners and operators affected by NESHAP in part 63. See Table 1 of this subpart for general provisions that apply (or don't apply) to you as an owner or operator subject to the requirements of this subpart.

§ 63.1195 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1177 through 63.1180.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37356, June 23, 2003]

§§ 63.1197-63.1199 [Reserved]

Table 1 to Subpart DDD of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart DDD of Part 63

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.1(a)(1)–(a)(4)	General Applicability	Yes	

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.1(a)(5)		No	[Reserved].
63.1(a)(6)–(a)(8)		Yes	
63.1(a)(9)		No	[Reserved].
63.1(a)(10)–(a)(14)		Yes	
63.1(b)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)		Yes	Some plants may be area sources.
63.1(c)(3)		No	[Reserved].
63.1(c)(4)–(c)(5)		Yes	
63.1(d)		No	[Reserved].
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1196.
63.3	Units and Abbreviations	Yes	
63.4(a)(1)–(a)(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved].
63.4(a)(5)		Yes	
63.4(b)–(c)	Circumvention/Severability	Yes	
63.5(a)	Construction/Reconstruction Applicability	Yes	
63.5(b)(1)	Existing, New, Reconstructed Sources Requirements	Yes	
63.5(b)(2)		No	[Reserved].
63.5(b)(3)–(b)(6)		Yes	
63.5(c)		No	[Reserved].
63.5(d)	Application for Approval of Construction/Reconstruction	Yes	
63.5(e)	Approval of Construction/Reconstruction	Yes	
63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes	

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.6(a)	Compliance with Standards and Maintenance Applicability	Yes	
63.6(b)(1)–(b)(5)	New and Reconstructed Sources Dates	Yes	
63.6(b)(6)		No	[Reserved].
63.6(b)(7)		Yes	
63.6(c)(1)	Existing Sources Dates	Yes	§63.1180 specifies compliance dates.
63.6(c)(2)		Yes	
63.6(c)(3)–(c)(4)		No	[Reserved].
63.6(c)(5)		Yes	
63.6(d)		No	[Reserved].
63.6(e)(1)–(e)(2)	Operation & Maintenance Requirements	Yes	§63.1187 specifies additional requirements.
63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes	
63.6(f)	Compliance with Emission Standards	Yes	
63.6(g)	Alternative Standard	Yes	
63.6(h)	Compliance with Opacity/VE Standards	No	Subpart DDD does not include VE/opacity standards.
63.6(i)(1)–(i)(14)	Extension of Compliance	Yes	§63.1180 specifies date.
63.6(i)(15)		No	[Reserved].
63.6(i)(16)		Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)	Performance Test Requirements Applicability	Yes	
63.7(b)	Notification	Yes	
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	
63.7(e)	Conduct of Tests	Yes	§63.1188 specifies additional requirements.
63.7(f)	Alternative Test Method	Yes	
63.7(g)	Data Analysis	Yes	

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.7(h)	Waiver of Tests	Yes	
63.8(a)(1)	Monitoring Requirements Applicability	Yes	
63.8(a)(2)		No	Subpart DDD does not require CMS performance specifications.
63.8(a)(3)		No	[Reserved].
63.8(a)(4)		Yes	
63.8(b)	Conduct of Monitoring	Yes	
63.8(c)(1)–(c)(3)	CMS Operation/Maintenance	Yes	
63.8(c)(4)–(c)(8)		No	Subpart DDD does not require COMS or CMS performance specifications.
63.8(d)	Quality Control	No	Subpart DDD does not require a CMS quality control program.
63.8(e)	CMS Performance Evaluation	No	Subpart DDD does not require CMS performance evaluations.
63.8(f)(1)–(f)(5)	Alternative Monitoring Method	Yes	
63.8(f)(6)	Alternative to RATA Test	No	Subpart DDD does not require CEMS.
63.8(g)(1)	Data Reduction	Yes	
63.8(g)(2)		No	Subpart DDD does not require COMS or CEMS.
63.8(g)(3)–(g)(5)		Yes	
63.9(a)	Notification Requirements Applicability	Yes	
63.9(b)	Initial Notifications	Yes	
63.9(c)	Request for Compliance Extension	Yes	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of Performance Test	Yes	
63.9(f)	Notification of VE/Opacity Test	No	Subpart DDD does not include VE/opacity standards.
63.9(g)	Additional CMS Notifications	No	Subpart DDD does not require CMS performance evaluation, COMS, or CEMS.

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.9(h)(1)–(h)(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved].
63.9(h)(5)–(h)(6)		Yes	
63.9(i)	Adjustment of Deadlines	Yes	
63.9(j)	Change in Previous Information	Yes	
63.10(a)	Recordkeeping/Reporting-Applicability	Yes	
63.10(b)	General Recordkeeping Requirements	Yes	§63.1192 includes additional requirements.
63.10(c)(1)	Additional CMS Recordkeeping	Yes	
63.10(c)(2)–(c)(4)		No	[Reserved].
63.10(c)(5)		Yes	
63.10(c)(6)		No	Subpart DDD does not require CMS performance specifications.
63.10(c)(7)–(c)(8)		Yes	
63.10(c)(9)		No	[Reserved].
63.10(c)(10)–(c)(13)		Yes	
63.10(c)(14)		No	Subpart DDD does not require a CMS quality control program.
63.10(c)(15)		Yes	
63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements in §63.1193.
63.10(d)(2)	Performance Test Results	Yes	
63.10(d)(3)	Opacity or VE Observations	No	Subpart DDD does not include VE/opacity standards.
63.10(d)(4)–(d)(5)	Progress Reports/ Startup, Shutdown, and Malfunction Reports	Yes	
63.10(e)(1)–(e)(2)	Additional CMS Reports	No	Subpart DDD does not require CEMS or CMS performance evaluations.
63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes	

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.10(e)(4)	COMS Data Reports	No	Subpart DDD does not require COMS.
63.10(f)	Recordkeeping/Reporting Waiver	Yes	
63.11(a)	Control Device Requirements Applicability	Yes	
63.11(b)	Flares	No	Flares not applicable.
63.12	State Authority and Delegations	Yes	
63.13	Addresses	Yes	
63.14	Incorporation by Reference	Yes	
63.15	Information Availability/Confidentiality	Yes	

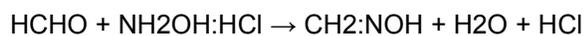
Appendix A to Subpart DDD of Part 63—Free Formaldehyde Analysis of Insulation Resins by the Hydroxylamine Hydrochloride Method

1. Scope

The method in this appendix was specifically developed for water-soluble phenolic resins that have a relatively high free-formaldehyde (FF) content such as insulation resins. It may also be suitable for other phenolic resins, especially those with a high FF content.

2. Principle

2.1 a. The basis for this method is the titration of the hydrochloric acid that is liberated when hydroxylamine hydrochloride reacts with formaldehyde to form formaldoxine:



b. Free formaldehyde in phenolic resins is present as monomeric formaldehyde, hemiformals, polyoxymethylene hemiformals, and polyoxymethylene glycols. Monomeric formaldehyde and hemiformals react rapidly with hydroxylamine hydrochloride, but the polymeric forms of formaldehyde must hydrolyze to the monomeric state before they can react. The greater the concentration of free formaldehyde in a resin, the more of that formaldehyde will be in the polymeric form. The hydrolysis of these polymers is catalyzed by hydrogen ions.

2.2 The resin sample being analyzed must contain enough free formaldehyde so that the initial reaction with hydroxylamine hydrochloride will produce sufficient hydrogen ions to catalyze the depolymerization of the polymeric formaldehyde within the time limits of the test method. The sample should contain approximately 0.3 grams (g) free formaldehyde to ensure complete reaction within 5 minutes.

3. Apparatus

3.1 Balance, readable to 0.01 g or better.

3.2 pH meter, standardized to pH 4.0 with pH 4.0 buffer and pH 7 with pH 7.0 buffer.

3.3 50-mL burette for 1.0 N sodium hydroxide.

3.4 Magnetic stirrer and stir bars.

3.5 250-mL beaker.

3.6 50-mL graduated cylinder.

3.7 100-mL graduated cylinder.

3.8 Timer.

4. Reagents

4.1 Standardized 1.0 N sodium hydroxide solution.

4.2 Hydroxylamine hydrochloride solution, 100 grams per liter, pH adjusted to 4.00.

4.3 Hydrochloric acid solution, 1.0 N and 0.1 N.

4.4 Sodium hydroxide solution, 0.1 N.

4.5 50/50 v/v mixture of distilled water and methyl alcohol.

5. Procedure

5.1 Determine the sample size as follows:

a. If the expected FF is greater than 2 percent, go to Part A in 5.1.c to determine sample size.

b. If the expected FF is less than 2 percent, go to Part B in 5.1.d to determine sample size.

c. Part A: Expected FF \geq 2 percent.

Grams resin = 60/expected percent FF

I. The following table shows example levels:

Expected percent free formaldehyde	Sample size, grams
2	30.0
5	12.0
8	7.5
10	6.0
12	5.0
15	4.0

ii. It is very important to the accuracy of the results that the sample size be chosen correctly. If the milliliters of titrant are less than 15 mL or greater than 30 mL, reestimate the needed sample size and repeat the tests.

d. Part B: Expected FF < 2 percent

Grams resin = 30/expected percent FF

I. The following table shows example levels:

Expected percent free formaldehyde	Sample size, grams
2	15
1	30
0.5	60

ii. If the milliliters of titrant are less than 5 mL or greater than 30 mL, reestimate the needed sample size and repeat the tests.

5.2 Weigh the resin sample to the nearest 0.01 grams into a 250-mL beaker. Record sample weight.

5.3 Add 100 mL of the methanol/water mixture and stir on a magnetic stirrer. Confirm that the resin has dissolved.

5.4 Adjust the resin/solvent solution to pH 4.0, using the prestandardized pH meter, 1.0 N hydrochloric acid, 0.1 N hydrochloric acid, and 0.1 N sodium hydroxide.

5.5 Add 50 mL of the hydroxylamine hydrochloride solution, measured with a graduated cylinder. Start the timer.

5.6 Stir for 5 minutes. Titrate to pH 4.0 with standardized 1.0 N sodium hydroxide. Record the milliliters of titrant and the normality.

6. Calculations

$$\% \text{ FF} = \frac{\text{mL sodium hydroxide} \times \text{normality} \times 3.003}{\text{grams of sample}}$$

7. Method Precision and Accuracy

Test values should conform to the following statistical precision:

Variance = 0.005

Standard deviation = 0.07

95% Confidence Interval, for a single determination = 0.2

8. Author

This method was prepared by K.K. Tutin and M.L. Foster, Tacoma R&D Laboratory, Georgia-Pacific Resins, Inc. (Principle written by R. R. Conner.)

9. References

9.1 GPAM 2221.2.

9.2 PR&C TM 2.035.

9.3 Project Report, Comparison of Free Formaldehyde Procedures, January 1990, K. Tutin.

This document was downloaded from the following source on September 26, 2011:

[Subpart DDD--NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR MINERAL WOOL PRODUCTION](#)

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

Addendum to the
Technical Support Document for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	U.S. Mineral Products Company (d/b/a Isolatek International)
Source Location:	701 North Broadway Street, Huntington, Indiana 46750
County:	Huntington
SIC Code:	3296
Permit Renewal No.:	T 069-31651-00021
Permit Reviewer:	Swarna Prabha

On October 16, 2012, the Office of Air Quality (OAQ) had a notice published in the Herald Press, Huntington, Indiana, stating that U.S. Mineral Products Company (d/b/a Isolatek International) had applied for a renewal to its Part 70 Operating Permit, issued on December 27, 2007. The notice also provided information on how the public could review the renewed permit (069-31651-00021) 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 October 19, 2011, Joe VanCamp, Cornerstone Environmental, Health and Safety, Inc., on behalf of U.S. Mineral Products Company (d/b/a Isolatek International), submitted comments on the renewal to Part 70 Operating Permit No. T069-18676-00021.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD after public notice, but all changes will be documented in this addendum. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1 :

As part of the renewal application process, the facility has requested that the allowable pressure drop range for baghouse CE #5 controlling the front end mineral wool bagger (EU #7), the PMF Line (EU #33), and the mineral wool baler (EU #5) be changed to a range of 0.1 to 6.0 inches of water. This is required due to the design and operation of this particular baghouse. Please also revise the pressure drop range on baghouse CE #6, which is similar in design, to a normal operating range of 0.1 to 6.0 inches of water.

Response 1:

Condition D.4.6 has been revised as requested. The revisions are as follows:

D.4.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) ~~The Permittee shall record the pressure drop across the baghouses, identified as CE#5 and CE#6, used in conjunction with the PMF Line and one (1) front end mineral wool bagger, identified as EU#7, and the one (1) batch blender, identified as EU#12, at least once per day when the PMF Line or one (1) front end mineral wool bagger, identified as EU#7, and the one (1) batch blender, identified as EU#12, are in operation and exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's~~

~~obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~

- (a) **The Permittee shall record the pressure drop across the baghouse, identified as CE #5 controlling the front end mineral wool bagger (EU #7), the PMF Line (EU #33), and the mineral wool baler (EU #5) at least once per day when the front end mineral wool bagger (EU #7), the PMF Line (EU #33), and the mineral wool baler (EU #5) are in operation and exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.1 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C-Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**
- (b) **The Permittee shall record the pressure drop across the baghouse, identified as CE #6 controlling the batch blender (EU #12) and the ribbon blender (EU #31), at least once per day when the batch blender (EU #12) and the ribbon blender (EU #31) are in operation and exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.1 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C-Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**
- (bc) The instrument used for determining the pressure shall comply with Section C -Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

IDEM Contact

- (a) Questions regarding this proposed Part 70 Permit can be directed to Swarna Prabha 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) (317-234-5376 or toll free at 1-800-451-6027 extension (4-5376).
- (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
Part 70 Operating Permit Renewal**

Source Description and Location
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Source Name:	U.S. Mineral Products Company (d/b/a Isolatek International)
Source Location:	701 North Broadway Street, Huntington, Indiana 46750
County:	Huntington
SIC Code:	3296
Second OP Permit Renewal No.:	T069-31651-00021
Permit Reviewer:	Swarna Prabha

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from U.S. Mineral Products Company (d/b/a Isolatek International) relating to the operation of a stationary acoustic and thermal insulation manufacturing plant. On March 22, 2012, Mineral Products Company (d/b/a Isolatek International) submitted an application to the OAQ requesting to renew its operating permit. U.S. Mineral Products Company (d/b/a Isolatek International) was issued its first Part 70 Operating Permit Renewal (T069-18676-00021) on December 27, 2007.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) Two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, approved in 2011 for construction, each with a maximum heat input capacity of 21.60 MMBtu/hr and each with a maximum melt capacity of 5.50 tons per hour, equipped with low-NO_x burners, flue gas re-circulation, and a shared baghouse, identified as CE#1, and exhausting to a shared stack, identified as Stack 1. Under 40 CFR Part 63, Subpart DDD, these are considered affected new cupolas.
- (b) Two (2) short stack cupolas, identified as EU#1 and EU#2, constructed before 1960, capacity: 5.0 tons of melt per hour and 1.5 tons of coke feed per hour, each, equipped with a shared baghouse, identified as CE#1, exhausted to shared Stack #1. Under 40 CFR Part 63, Subpart DDD, these are considered affected existing cupolas.

NOTE: Pursuant to the Significant Source modification, Permit # 069-30891-0002, the Permittee shall decommission and permanently shut down the two (2) cupolas, identified as EU#1 and EU#2 within one hundred eighty (180) days after start up of the second of the two natural gas-fired mineral wool melters.

- (c) Two (2) blowchambers, identified as EU#3 and EU#4, constructed before 1978, capacity: 4.0 tons of molten mineral feed per hour each, and each equipped with a screen house, identified as CE#3 and CE#4.
- (d) One (1) Cafco Process Line, identified as EU#41, originally constructed in 1980, with a capacity of 12.0 tons of blended product per hour, with all particulate emissions exhausted to a baghouse, identified as CE#9, exhausted to Stack #9, consisting of the following:
 - (1) Five (5) permanent hoppers, identified as EU#14 through EU#18.
 - (2) One (1) portable refeed hopper, identified as EU#27.
 - (3) One (1) live bottom hopper, identified as EU#19.

- (4) One (1) transfer auger, identified as EU#23.
- (5) One (1) mixer, identified as EU#24.
- (6) One (1) granulator, identified as EU#20.
- (7) One (1) automatic bagger, identified as EU#21, constructed in 2005, equipped with its own baghouse, identified as CE#10, with an outside exhaust.
- (8) One (1) dedust oil tank, identified as EU#34, constructed prior to 1980, exhausted to Stack #17, capacity: 7,000 gallons.
- (9) One (1) dedust oil tank, identified as EU#38, constructed in 1997, exhausted to Stack #21, capacity: 8,000 gallons.
- (10) Two (2) portable hoppers, identified as EU#25 and EU#26.

NOTE: These are existing portable hoppers and were inadvertently left out from the existing permit. These hoppers have been in use as part of the Cafeco process Line.

- (e) One (1) front end mineral wool bagger, identified as EU#7, constructed in 1987, capacity: 5.0 tons of bagged mineral wool per hour, equipped with a baghouse, identified as baghouse CE#5, exhausted to Stack #5.
- (f) One (1) batch blender, identified as EU#12, constructed in 1993, capacity: 5.0 tons of blended product per hour, equipped with a baghouse, identified as CE#6, exhausted to Stack #6.
- (g) One (1) ribbon blender, identified as EU#31, constructed in 1988, capacity: 2.0 tons of dry powdered binders per year, equipped with a baghouse, identified as CE#6, exhausted to Stack #6,
- (h) One (1) process line, identified as PMF line (EU#33), approved in 2010 for construction, including a PMF bagger, classifier and attrition mill, equipped with a baghouse, identified as CE#5, exhausted to Stack #5, capacity: 5.0 tons of bagged mineral wool per hour.

Insignificant Activities

- (a) One (1) slag cement silo, identified as EU#32, approved in 2010 for construction, equipped with an integral baghouse, identified as CE#11, exhausted to Stack #11, capacity: 54.0 tons of Portland cement per hour. [326 IAC 6-3-2] [326 IAC 2-2]
- (b) One (1) mineral wool baler, identified as EU#5, constructed in 2005, controlled by baghouse CE#5, exhausted to Stack #5, capacity: 12.0 tons of baled mineral wool per hour. [326 IAC 6-3-2]
- (c) One (1) chipped gypsum silo, identified as EU#10, constructed in 1991, equipped with an Integral baghouse, identified as CE#8, exhausted to Stack #8, capacity: 54.0 tons of gypsum per hour. [326 IAC 6-3-2] [326 IAC 2-2]

NOTE: Smaller bin-top gypsum silo has small filtering unit; there are no defined visible emissions or pressure drop ranges associated with this. Instead, the Permittee has prepared a Preventive Maintenance Plan for the unit to ensure proper operation.

- (d) One (1) cement silo, identified as EU#11, constructed in 1990, equipped with an integral baghouse, identified as CE#7, exhausted to Stack #7, capacity: 54.0 tons of Portland cement per hour. [326 IAC 6-3-2] [326 IAC 2-2]

NOTE: Smaller bin-top gypsum silo has small filtering unit; there are no defined visible emissions or pressure drop ranges associated with this. Instead, the Permittee has prepared a Preventive Maintenance Plan for the unit to ensure proper operation.

- (e) One (1) mineral wool bin, identified as EU#8, constructed before 1985, equipped with a pneumatic conveyor that incorporates a totally enclosed air recycled system, capacity: 10.0 tons of mineral wool per hour. [326 IAC 6-3-2]
- (f) One (1) gypsum silo, identified as EU#9, constructed prior to 1980, equipped with an integral baghouse, identified as CE#8, exhausted to Stack #8, capacity: 54.0 tons of gypsum per hour. [326 IAC 6-3-2] [326 IAC 2-2]

NOTE: Smaller bin-top gypsum silo has small filtering unit; there are no defined visible emissions or pressure drop ranges associated with this. Instead, the Permittee has prepared a Preventive Maintenance Plan for the unit to ensure proper operation.

- (g) One (1) debaler, identified as EU#13, constructed in 1980, exhausted inside the building, capacity: 5.0 tons of mineral wool per hour.
- (h) One (1) raw material receiving yard, identified as EU#29, constructed prior to 1980, capacity: 216 tons of rock, slag and coke per hour, total.
- (i) One (1) batching station, identified as EU#30, constructed prior to 1980, capacity: 14.4 tons of rock and coke per hour, total.
- (j) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including the following:
 - (1) One (1) with a total heat input capacity of 4.38 million British thermal units per hour (MMBtu/hr). There are no boilers at this source.
- (k) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (l) Noncontact cooling tower systems with a forced and induced draft cooling tower system not regulated under a NESHAP.
- (m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (n) Heat exchanger cleaning and repair.
- (o) Process vessel degassing and cleaning to prepare for internal repairs.
- (p) A laboratory as defined in 326 IAC 2-7-1(21)(H).
- (q) One (1) PEG400 VOC tank, identified as EU#35, constructed in 1990, capacity: 8,000 gallons.

Insignificant Emission Units added

The source has requested following units be listed as insignificant activities. Pursuant to 2-7-11(8)(B), these insignificant activities as defined in 326 IAC 2-7-1(21) qualify as exempt under 326 IAC 2-1.1-3, and are not subject to 326 IAC 2-7-10.5. Please see TSD Appendix A for emission calculation.

The following insignificant activities are being added during this renewal:

- (a) Two (2) two maintenance parts washing tanks used for degreasing small parts.

- (b) One (1) welding process, with two welding stations consisting of metal-cored submerged arc (SAW) welding with flux.

NOTE: The flux material does not contain any VOC or HAPs.

- (c) One (1) black ink jet printer, to apply identification number to bags of finished product prior to shipping.

Existing Approvals

The source was issued Part 70 Operating Permit No. 069-18676-00021 on December 27, 2007. The source has since received the following approvals:

- (a) Minor Source Modification No. 069-29473-00021, September 26, 2010; and
- (b) Significant Permit Modification No. 069-29088-00021, October 25, 2010.
- (c) Significant Source Modification No. 069-30891-00021, December 15, 2011.
- (d) Significant Permit Modification No. 069-30903-00021, January 6, 2012.

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

Air Pollution Control Justification as an Integral Part of the Process

- (a) Pursuant to Permit No.: 069-18676-00021, issued on December 27, 2007, the baghouses associated with the three (3) silos, identified as EU#9, EU#10 and EU#11 are still considered integral controls.
- (b) Pursuant to Significant Permit Modification Permit No.: 069-29088-00021, issued on October 25, 2010, the baghouse associated with the one (1) slag cement silo, identified as EU#32, is still considered an integral control device. The control equipment serves a primary purpose other than pollution control.

NOTE: The materials are pneumatically conveyed. Therefore, the baghouses are required to move the product. If the bags were not present, most of the product would escape to the atmosphere.

Operating conditions in the renewal permit will specify that these baghouses shall still operate at all times when material is being moved into or out of the silos.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Huntington County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 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 Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

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

- (b) **PM_{2.5}**
Huntington County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**
Huntington County has been classified as attainment or unclassifiable in Indiana for SO₂, CO, PM₁₀, NO₂, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, because this facility manufactures mineral wool using raw materials such as slag and rock, is not considered a glass fiber processing operation, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

The table reflects the unrestricted potential emissions of the source.

Pollutant	Emissions (ton/yr)
PM	Greater than 250
PM ₁₀	Greater than 250
PM _{2.5}	Greater than 250
SO ₂	Greater than 250
VOC	Less than 250
CO	Greater than 250
NO _x	Less than 250
GHG as CO ₂ e	Less than 100,000
HAPs	
Carbonyl Sulfide	>10
Total	>25

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

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHG is less than one hundred thousand (100,000) tons of CO₂ equivalent (CO₂e) emissions per year.

Actual Emissions

The following table shows the actual emissions as reported by the source. This information reflects the 2010 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM ₁₀	25
PM _{2.5}	22
SO ₂	224
VOC	16
CO	6,500
NO _x	42
HAP (specify)	not reported

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, 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 Renewal (tons/year)									
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	GHGs	Total HAPs	Worst Single HAP
Cupola EU#1	2.19	2.19	2.19	252	50.5	0	7,884	15451.2	>25	94.6 (COS)
Cupola EU#2	2.19	2.19	2.19	252	50.5	0	7,884	15,311.9	>25	94.6 (COS)
Melters EU-1A and EU-2A	4.82	14.63	9.77	284.0	88.35	1.04	15.89	36,894.8	101.6	101.6 (H2S)
Blow Chamber-EU#3	45.6	45.6	45.6	15.2	0	15.8	0	0	0	0
Blow Chamber-EU#4	45.6	45.6	45.6	15.2	0	15.8	0	0	0	0
Gypsum Silo EU#9*	22.5	13.8	13.8	0	0	0	0	0	0	0
Insignificant raw material receiving yard EU#29	2.31	1.10	1.10	0	0	0	0	0	0	0
Insignificant batching station EU#30	0.154	0.073	0.073	0	0	0	0	0	0	0
Cafco Process Line EU#41	22.8	12.8	12.8	0	0	2	0	0	0	0
Insignificant Debaler EU#13	2.19	2.19	2.19	0	0	0	0	0	0	0
Insignificant mineral wool bin EU#8	4.38	4.38	4.38	0	0	0	0	0	0	0
Front end mineral wool bagger EU#7	21.9	14.98	14.89	0	0	0	0	0	0	0
Ribbon Blender EU#31	8.76	8.76	8.76	0	0	0	0	0	0	0
Cement Silo EU#11	24.97	14.98	14.98	0	0	0	0	0	0	0
PEG400 tank (EU#35)	0	0	0	0	0	1	0	0	0	0
Dedust oil tank (EU#34)	0	0	0	0	0	1	0	0	0	0
Dedust oil tank (EU#38)	0	0	0	0	0	1	0	0	0	0
Chip Gypsum Silo EU#10	24.97	14.98	14.98	0	0	0	0	0	0	0
Batch Blender EU#12	21.9	21.9	21.9	0	0	0	0	0	0	0
Insignificant mineral wool baler EU#5	5.26	5.26	5.26	0	0	0	0	0	0	0
Automatic bagger at the Cafco Process Line EU#21	0.939	0.329	0.329	0	0	0	0	0	0	0
PMF line EU#33	21.90	21.90	21.90	0	0	0	0	0	0	0

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	GHGs	Total HAPs	Worst Single HAP
Slag cement Silo EU#32	24.97	14.98	14.98	0	0	0	0	0	0	0
Insignificant Two (2) Parts Washer	0	0	0	0	0	0.34	0	0	0	0
Insignificant Welding Stations	0.16	0.16	0.16	0	0	0	0	11.61	negl.	negl.
Insignificant Ink Jet Printing	0	0	0	0	0	0.21	0	0	0	0
Fugitive Emissions	3.90	0.78	0.19	0	0	0	0	0	0	0
Total PTE of Entire Source	319.2	271.3	265.8	819.1	191.2	37.2	15,769	39,222.5	>25	>10
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO ₂ e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO ₂ e	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	N/A	N/A	N/A	N/A	N/A	N/A	N/A	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".
**PM_{2.5} listed is direct PM_{2.5}.
*** Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gas (GHG) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO2 equivalent (CO2e) emissions. Therefore, CO2e emissions have been calculated for this source. Based on the calculations the unlimited potential to emit greenhouse gases from the entire source is less than 100,000 tons of CO2e per year.

NOTE: Italicized numbers represent limited emissions based on the TV Permit No. 069-18676-00021 Issued on December 27, 2007 and Significant Permit Modification No. 069-30903-00021, issued on January 6, 2012. The Permittee requested to keep the existing limits.

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

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

- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing, emission unit and specified pollutant subject to CAM.

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Un-controlled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Cupola EU#1 (PM), (PM ₁₀), and (PM _{2.5})	Baghouse (CE#1)	Y	350	2.10	100	N	N
Cupola EU#1 (SO ₂)	None	N	252	252	100	N	N
Cupola EU#1 (NOx)	None	N	50.5	50.5	100	N	N
Cupola EU#1 (CO)	None	Y	7,884	7,884	100	N	N
Cupola EU#1 (HAPs, Carbonyl Sulfide)	Baghouse (CE#1)	N	94.6	94.6	10	N	N
Cupola EU#2 (PM), (PM ₁₀), and (PM _{2.5})	Baghouse (CE#1)	Y	350	2.10	100	N	N
Cupola EU#2 (SO ₂)	None	N	252	252	100	N	N
Cupola EU#2 (NOx)	None	N	50.5	50.5	100	N	N
Cupola EU#2 (CO)	None	N	7,884	7,884	100	N	N
Cupola EU#2 (HAPs, Carbonyl Sulfide)	Baghouse (CE#1)	N	94.6	94.6	10	N	N
Melter EU-1A (PM)	BH	Y	530.16	0.53	100	Y	N
Melter EU-1A (PM ₁₀)	BH	Y	530.16	0.53	100	Y	N
Melter EU-1A (PM _{2.5})	BH	Y	487.34	0.49	100	Y	N
Melter EU-2A (PM)	BH	Y	487.34	0.49	100	Y	N
Melter EU-2A (PM ₁₀)	BH	Y	487.34	0.49	100	Y	N
Melter EU-2A (PM _{2.5})	BH	Y	487.34	0.49	100	Y	N
Blow-chamber EU#3 (PM) and (PM ₁₀)	Screenhouse (CE#3)	Y	210	21.0	100	Y	N
Blow-chamber EU#3 (SO ₂)	None	N	15.2	15.2	100	N	N
Blow-chamber EU#3 (VOC)	None	N	15.8	15.8	100	N	N
Blow-chamber EU#4 (PM) and (PM ₁₀)	Screenhouse (CE#4)	Y	210	21.0	100	Y	N
Blow-chamber EU#4 (SO ₂)	None	N	15.2	15.2	100	N	N
Blow-chamber EU#4 (VOC)	None	N	15.8	15.8	100	N	N
Caferco Process Line EU#41 (PM) and (PM ₁₀)	Baghouses (CE#9 and CE#10)	Y	301	3.19	100	Y	N
Front End Bagger EU#7 (PM) and (PM ₁₀)	Baghouse (CE#5)	Y	21.9	0.219	100	N	N
Batch Blender EU#12 (PM) and (PM ₁₀)	Baghouse (CE#6)	Y	21.9	0.219	100	N	N
Ribbon Blender EU#31 (PM)	Baghouse (CE#6)	Y	8.76	0.088	100	N	N
Ribbon Blender EU#31 (PM ₁₀)	Baghouse (CE#6)	N	8.76	0.088	100	N	N
PMF Line (EU#33) PM/PM-10	BH	Y	21.9	0.22	100	N	N
Slag Cement Silo (EU#32) PM/PM-10	BH	Y	170.29/108.80	1.7/1.09	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the following units:

- (a) Melters EU-1A and EU-2A for PM, PM₁₀, and PM_{2.5}

- (b) Two (2) blowchambers, identified as EU#3 and EU#4 for PM, and the one (1) Cafco Process Line, identified as EU#41 for PM and PM₁₀.
- (c) Slag cement silo (EU#32) for PM and PM₁₀.

The two (2) cupolas, identified as EU#1 and EU#2, and mineral wool melters, identified as EU-1A and EU-2A are subject to a NESHAP (40 CFR 63, Subpart DDD), which is a NESHAP that was proposed after November 15, 1990, under Section 112 of the Clean Air Act. This NESHAP, Subpart DDD, restricts PM emissions. The compliance requirements contained therein will satisfy the requirements of 40 CFR 64 and a CAM plan is not required for these units.

NSPS:

- (a) 40 CFR Part 60, Subpart PPP (New Source Performance Standard for Wool Fiberglass Insulation Manufacturing Plants,

This source does not produce insulation material composed of glass fibers made from glass produced or melted at the source, only uses mineral wool. Therefore, this source does not meet the definition of a wool fiberglass insulation manufacturing line and the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, are not subject to the requirements of the New Source Performance Standard for Wool Fiberglass Insulation Manufacturing Plants, 40 CFR 60.680, Subpart PPP. The requirements of the New Source Performance Standard for Wool Fiberglass Insulation Manufacturing Plants, 40 CFR 60.680, Subpart PPP, are not included in the permit.

- (b) The requirements of 40 CFR 60, Subpart K (Standards of Performance for Storage Vessels for Petroleum fuels for which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978) are not included in this permit for this source because each storage tank has a storage capacity that is less than 40,000 gallons.
- (c) The one (1) dedust oil tank, identified as EU#34, was constructed after May 18, 1978, and have capacity less than 40,000 gallons. Therefore, the requirements of the Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984, 40 CFR 60, Subpart Ka, are not included in the permit.
- (d) The one (1) dedust oil tank, identified as EU#38, and the one (1) PEG400 VOC tank, identified as EU#35, were both constructed after July 23, 1984, and both have capacities less than 75 cubic meters. Therefore, the Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb are not included in the permit.
- (e) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification

NESHAP:

- (a) 40 CFR Part 63, Subpart DDD (National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production

This source is subject to the National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production, 40 CFR 63, Subpart DDD, which is incorporated by reference by 326 IAC 20-46. The Permittee operates a mineral wool production facility at a major source of HAPs. Pursuant to 40 CFR 63.1175, this subpart establishes national emission standards for hazardous air pollutants emitted from existing, new, and reconstructed cupolas and curing ovens at facilities that produce mineral wool. The two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, and two (2) cupolas, identified as EU#1 and EU#2 are considered affected facilities.

Nonapplicable portions of the NESHAP will not be included in the permit. The existing cupolas are subject to the following portions of 40 CFR 63, Subpart DDD:

- (1) 40 CFR 63.1175
- (2) 40 CFR 63.1176
- (3) 40 CFR 63.1177
- (4) 40 CFR 63.1178 (a)(1), (a)(2)(i), and (b)
- (5) 40 CFR 63.1180 (b), (c), and (d)
- (6) 40 CFR 63.1181
- (7) 40 CFR 63.1182
- (8) 40 CFR 63.1184
- (9) 40 CFR 63.1185
- (10) 40 CFR 63.1186
- (11) 40 CFR 63.1187
- (12) 40 CFR 63.1188 (a), (b), (d), (f), (g), (h), and (i)
- (13) 40 CFR 63.1189 (a), (b), (c), (d), (e), (f), and (g)
- (14) 40 CFR 63.1190 (a) and (b)
- (15) 40 CFR 63.1191 (a)(2), (b), (d), and (e)
- (16) 40 CFR 63.1192
- (17) 40 CFR 63.1193
- (18) 40 CFR 63.1194
- (19) 40 CFR 63.1195
- (20) Table 1 to Subpart DDD of Part 63 - Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart DDD of Part 63 (Applicable Portions)

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart DDD.

(b) 40 CFR Part 63, Subpart NNN (National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing)

The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart NNN (National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing), are not included in this permit since this source does not use mineral wool consisting of fiberglass. It uses raw materials such as slag and rock.

(c) 40 CFR Part 63, Subpart CCCCC (National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities)

This source is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCC), because the source is a major source of HAPs

(d) 40 CFR Part 63, Subpart EEEE—National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart EEEE (Organic Liquids Distribution (Non-Gasoline)), are not included in this permit since fuel used are consumed or dispensed on the plant site. Therefore, the diesel storage tank used to power front-end loaders for on-site transfer of raw materials is not subject to this requirement.

(e) 40 CFR Part 63, Subpart T (National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning)

The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart T (Halogenated Solvent Cleaning), are not included in this permit since it has neither vapor nor cold cleaning machines (of either batch or in-line design) according to the definitions pursuant to 40 CFR 63.461. This source does not heat any solvent (which would meet the definition of "cold" cleaning), nor does it boil any solvent (which would meet the definition of "vapor" cleaning). Moreover, the source uses none of the solvents listed at 40 CFR 63.460(a), nor any combination of these in a total concentration greater than five (5) percent by weight, as a cleaning agent.

State Rule Applicability- Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 2-6 (Emission Reporting)

This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of PM and PM10 are greater than 250 tons per year, and the potential to emit of CO, is greater than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), an emission statement shall be submitted annually by July 1. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

326 IAC 6-4 (Fugitive Dust Emissions)

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

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

The source-wide fugitive particulate emissions are less than 25 tons per year; therefore, this rule does not apply to this source.

326 IAC 6.5 (PM Limitations Except Lake County)

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

326 IAC 6.8 PM Limitations for Lake County

This source is not subject to 326 IAC 6.8 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

State Rule Applicability-natural gas-fired mineral wool melters (EU-1A and EU-2A), and two (2) Short stack cupolas (EU#1 and EU#2):

326 IAC 2-2 (Prevention of Significant Deterioration)

The source will continue to comply with the following existing limits in the permit:

- (a) Pursuant 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the natural gas-fired mineral wool melters (EU-1A and EU-2A), and two (2) short stack cupolas (EU#1 and EU#2), the Permittee shall comply with the following conditions:
 - (1) PM emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 1.10 lb/hr, combined.

- (2) PM10 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 3.34 lb/hr, combined.
- (3) PM2.5 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.23 lb/hr, combined.
- (4) The SO₂ emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 7.33 pounds per ton of material feed, each.
- (5) The NO_x emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.28 pounds per ton of material feed, each.
- (6) The H₂S emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.62 pounds per ton of material feed, each.
- (7) The material input to the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 77,500.0 tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.
- (8) Within one hundred eighty (180) days after startup of the second of the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, the Permittee shall decommission and permanently shutdown the two (2) short stack cupolas, identified as EU#1 and EU#2.

NOTE: The two (2) cupolas, identified as EU#1 and EU#2, and the two (2) blow chambers, identified as EU#3 and EU#4, were constructed prior to August 7, 1977, and have the potential to emit more than 250 tons per year of SO₂ and CO. Therefore, this source was already a major source on August 7, 1977, but PSD review was not required for those units.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation the natural gas-fired mineral wool melters, identified as EU-1A, and EU-2A, will each emit greater than ten (10) tons per year for a single HAP. Therefore, 326 IAC 2-4.1 would apply to the EU-1A and EU-2A; however, pursuant to 326 IAC 2-4.1-1(b)(2), because these facilities are specifically regulated by NESHAP 40 CFR 63, Subpart DDD, which was issued pursuant to Section 112(d) of the CAA, these facilities are exempt from the requirements of 326 IAC 2-4.1.

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

Pursuant to 326 IAC 6-3-1(c), 326 IAC 6-3 shall not apply if a particulate matter limitation established in 326 IAC 20-46, concerning national emission standards for hazardous air pollutants is more stringent than the particulate limitation established in this rule. The particulate matter (PM) from the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, are limited to 0.1 pound per ton of melt by NESHAP Subpart DDD. This is equivalent to 0.55 pounds per hour, each, when operating at the maximum process weight rate of 5.50 tons of melt per hour. If limited by 326 IAC 6-3-2, the particulate emission rate would be limited to 12.85 pounds per hour, each, as calculated using the following equation:

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

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

The baghouse CE#1 shall be in operation at all times the EU-1A and EU-2A are in operation, in order to comply with NESHAP Subpart DDD. 40 CFR Part 63, NESHAP Subpart DDD are more stringent than the requirements of 326 IAC 6-3-2.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential to emit SO₂ from each of the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, is greater than twenty-five (25) tons per year or ten (10) pounds per hour. Therefore, the two (2) melters are subject to the requirements of 326 IAC 7-1.1. However, there are no applicable limitations for natural gas-fired units. Therefore, the requirements of 326 IAC 7-1.1 are not included in the permit.

326 IAC 8-1-6 (New facilities; General reduction requirements)

The potential VOC emissions from each of the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

State Rule Applicability -Two (2) blowchambers, identified as EU#3 and EU#4, and One (1) Cafco Process Line, identified as EU#41

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the one (1) Cafco Process Line, identified as EU#41, the Permittee shall comply with the following conditions:

The potential to emit PM from the facilities at the one (1) Cafco Process Line exhausting to the one (1) baghouse, identified as CE#9, and Stack #9, shall be limited to less than 5.2 pounds per hour of PM and 2.92 pounds per hour of PM₁₀.

NOTE: The one (1) Cafco Process Line, identified as EU#41, and the one (1) insignificant debaler, identified as EU#13, were constructed in 1980. The unrestricted potential PM and PM₁₀ emissions from the 1980 modification are greater than twenty-five (25) and fifteen (15) tons per year, respectively. This will limit the potential to emit PM and PM₁₀ from the 1980 modification to less than twenty-five (25) and fifteen (15) tons per year, respectively, and render 326 IAC 2-2, PSD, not applicable. The potential to emit after control by the baghouse, identified as CE#9, is 0.643 pounds per hour of PM and PM₁₀. Therefore, the facilities at the one (1) Cafco Process Line are able to comply with this limit.

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the two (2) blowchambers, identified as EU#3 and EU#4, shall not exceed 10.4 pounds per hour, each, when operating at a process weight rate of 4.0 tons per hour, each.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the Cafco Process Line, identified as EU#41, shall not exceed 21.7 pounds per hour when operating at a process weight rate of 12.0 tons per hour.

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

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

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

The screenhouses identified as CE#3 and CE#4 and baghouse CE#9 shall be in operation at all times the two (2) blowchambers, identified as EU#3 and EU#4, and Cafco Process Line, identified as EU#41 are in operation, in order to comply with these limits.

State Rule Applicability –Mineral wool bagger (EU#7), batch Blender (EU#12), ribbob Blender (EU#31), Slag Cement Silo EU#32, PMF line (EU#33)

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following conditions.

- (1) The potential to emit PM from the one (1) front end mineral wool bagger, identified as EU#7, shall be less than 5.13 pounds per hour.
- (2) The potential to emit PM₁₀ from the one (1) front end mineral wool bagger, identified as EU#7, shall be less than 3.42 pounds per hour.

NOTE: This will limit the potential to emit PM to less than twenty-five (25) tons per year and PM₁₀ to less than fifteen (15) tons per year from the front end mineral wool bagger. The potential to emit after control by the one (1) baghouse, identified as CE#5, is 0.050 pounds per hour. Therefore, the one (1) front end mineral wool bagger, identified as EU#7, is able to comply with this rule.

- (2) The potential to emit PM₁₀ from the one (1) batch blender, identified as EU#12, shall be less than 3.42 pounds per hour.

NOTE: This will limit the potential to emit PM₁₀ to less than fifteen (15) tons per year from the batch blender. The potential to emit after control by the one (1) baghouse, identified as CE#6, is 0.050 pounds per hour. Therefore, the one (1) batch blender, identified as EU#12, is able to comply with this rule.

- (3) The potential to emit from the one (1) slag cement silo, identified as EU#32, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀.

NOTE: This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) slag cement silo, identified as EU#32, and render the requirements of 326 IAC 2-2, PSD, not applicable. The potential to emit after control by the integral baghouse is 0.388 pounds per hour. Therefore, this unit is able to comply with this rule.

- (4) The potential to emit PM₁₀ from the PMF Line (EU#33) shall be less than 3.42 pounds per hour.

NOTE: This will limit the potential to emit PM₁₀ to less than fifteen (15) tons per year from the PMF Line. The potential to emit after control by the PMF Line, identified by EU#33 is 0.05 pounds per hour. Therefore, this unit is able to comply with this rule.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the PMF Line (EU#33) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply to these units.

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) front end mineral wool bagger, identified as EU#7, shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) batch blender, identified as EU#12, shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.

- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) ribbon blender, identified as EU#31, shall not exceed 6.52 pounds per hour when operating at a process weight rate of 2.0 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the PMF Line EU#33 shall not exceed 12.1 pounds per hour when operating at a process weight rate of 5.0 tons per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) slag cement silo, identified as EU#32, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.

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

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

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

The baghouses identified as CE#5 and CE#6, CE#9 shall be in operation at all times the respective emission units are in operation, in order to comply with these limits

State Rule Applicability –Mineral wool baler (EU#5), Mineral wool bin (EU#8), gypsum silo (EU#9), chipped gypsum silo EU#10, cement silo (EU#11), slag cement silo (EU#32)

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Minor Limit)

Pursuant 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the one (1) gypsum silo, identified as EU#9, one (1) chipped gypsum silo, identified as EU#10, one (1) cement silo, identified as EU#11, and the one (1) slag cement silo, identified as EU#32, the Permittee shall comply with the following conditions.

- (1) The potential to emit PM from the facilities at the one (1) gypsum silo, identified as EU#9, shall be less than 5.13 pounds per hour of PM and 3.15 pounds per hour of PM₁₀.

NOTE: The one (1) gypsum silo, identified as EU#9, one (1) raw material receiving yard, identified as EU#29, and one (1) batching station, identified as EU#30, all of which are insignificant activities due to the unrestricted potential emission levels, were all constructed prior to 1980, but possibly after August 7, 1977. Assuming they were all constructed as part of one (1) modification, the potential to emit PM and PM₁₀ is less than twenty-five (25) and fifteen (15) tons per year after control by the integral baghouse on the one (1) gypsum silo, identified as EU#9.

- (2) The potential to emit PM from the one (1) chipped gypsum silo, identified as EU#10, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀.

NOTE: This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) cement silo, identified as EU#10. The potential to emit after control by the one (1) integral baghouse, identified as CE#7, is 0.389 pounds of PM per hour and 0.248 pounds of PM₁₀ per hour. Therefore, the one (1) chipped gypsum silo, identified as EU#10, is able to comply with this limit.

- (3) The potential to emit from the one (1) cement silo, identified as EU#11, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀.

NOTE: This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) cement silo, identified as EU#11. The potential to emit after control by the one (1) integral baghouse, identified as CE#7, is 0.389 pounds of PM per hour and 0.248 pounds of PM₁₀ per hour. Therefore, the one (1) cement silo, identified as EU#11, is able to comply with this limit.

- (4) The potential to emit from the one (1) slag cement silo, identified as EU#32, shall be limited to less than 5.7 pounds per hour of PM and 3.42 pounds per hour of PM₁₀.

NOTE: This will limit the potential to emit PM and PM₁₀ to less than twenty-five (25) and fifteen (15) tons per year, respectively, from the one (1) slag cement silo, identified as EU#32. The potential to emit after control by the one (1) integral baghouse, identified as CE#11, is 0.389 pounds of PM per hour and 0.248 pounds of PM₁₀ per hour. Therefore, the one (1) slag cement silo, identified as EU#32, is able to comply with this rule.

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) mineral wool baler, identified as EU#5, shall not exceed 21.7 pounds per hour when operating at a process weight rate of 12.0 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) mineral wool bin, identified as EU#8, shall not exceed 19.2 pounds per hour when operating at a process weight rate of 10.0 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) gypsum silo, identified as EU#9, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) chipped gypsum silo, identified as EU#10, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) cement silo, identified as EU#11, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.
- (f) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) cement silo, identified as EU#32, shall not exceed 45.3 pounds per hour when operating at a process weight rate of 54.0 tons per hour.

The pounds per hour limitations were calculated with the following equations:

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

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

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where} \quad E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The respective integral baghouses identified as CE#8 and CE#7, and CE#11 shall be in operation at all times the respective units are in operation, in order to comply with this limit.

State Rule Applicability-Two (2) two maintenance parts washers

The two parts washers containing organic solvent at a temperature below the boiling point of the solvent are used to brush, flush, or immerse an article for the purpose of cleaning or degreasing.

Pursuant to 326 IAC 8-3-2, for each of the parts washers, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 Volatile Organic Compounds (VOC)

- (a) Pursuant 326 IAC 8-3-5(a), the owner or operator shall ensure that the following control equipment requirements are met for each of the parts washers:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5(b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant 326 IAC 8-3-5(b), the owner or operator shall ensure that the following operating requirements are met for each of the parts washers:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or unit dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

State Rule Applicability - Black Ink jet Printer

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

The black ink jet printer is not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because it does not have the potential to emit particulate.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The black ink jet printer is not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) it does not have the potential to emit greater than twenty-five (25) tons per year of VOC.

326 IAC 8-5-5 (Graphic Arts Operations)

326 IAC 8-5-5 (Graphic Arts Operations) does not apply to this facility because the rule pertains to rotogravure and flexographic printing presses.

State Rule Applicability – brazing, cutting, soldering

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

- (a) Pursuant to 326 IAC 6-3-1(b)(9) (Particulate Emission Limitations for Manufacturing Processes) the particulate matter (PM) from the welding, operation is exempt because the welding operations use less than six hundred twenty-five (625) pounds of rod or wire is per day.
- (b) Pursuant to 326 IAC 6-3-1(b)(10), the particulate matter (PM) from the torch cutting is exempt because torch cutting operation uses less than three thousand four hundred (3,400) inches per hour of stock one (1) inch thickness or less.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination and Monitoring Requirements applicable to this source are as follows:

Compliance Determination

Testing Requirements:

In order to determine the compliance status with emissions limitations under 326 IAC 2-2 and 326 IAC 6-3-2, testing shall be conducted for the natural gas-fired melters, identified as EU-1A, EU-2A and Cafeco process Line as follows:

Emission Unit	Control Device	Time Frame for Testing	Timeframe for Testing	Pollutant	Frequency of Testing
EU-1A, EU-2A,	BH (CE#1)	No later than 180 days after start up	Five years from the most recent valid compliance demonstration	PM,PM10, PM2.5, SO2, NOx, H2S	Once every 5 years from last valid stack test
Cafeco Process Line EU#41	BH (CE#9)	-	Five years from the most recent valid compliance demonstration	PM,PM10, PM2.5	Once every 5 years

The respective baghouses shall be in operation when respective emission units are in operation.

Compliance Monitoring

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
CE#1 (baghouse for EU-1A and EU-2A)	Water Pressure Drop	Daily	0.2 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
CE#9 (baghouse for EU#41 and Cafeco Process Line)	Water Pressure Drop	Daily	0.2 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

CE#10 (baghouse for EU#21)	Water Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
CE#6 (baghouse for EU#12, EU#31)	Water Pressure Drop	Daily	1.0 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
*CE#5 (baghouse for EU#5, EU#7 and EU#33)	Water Pressure Drop	Daily	0.1 to 6.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

* The source has requested to change the pressure drop range for baghouse CE#5 from 1.0 to 6.0 inches to 0.1 to 6.0 inches of water which is more consistent with Cafco process line baghouse (CE#9).

The two (2) cupolas, identified as EU#1 and EU#2, and two (2) natural gas fired mineral wool melters, identified as EU-1A and EU-2A must comply with the monitoring requirements in 40 CFR 63, Subpart DDD.

These monitoring conditions are necessary because the respective baghouses must operate properly to ensure compliance with 326 IAC 6-3-2 and 326 IAC 2-7 and 326 IAC 2-2 (PSD).

These monitoring conditions are also applicable pursuant to 40 CFR 64, Compliance Assurance Monitoring (CAM), for the two (2) blowchambers, identified as EU#3 and EU#4, and the Cafco Process Line, identified as EU#41.

Recommendation

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

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

An application for the purposes of this review was received on March 26, 2012.

Conclusion

The operation of this U.S. Mineral Products Company shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No.: T069-31651-00021.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Swarna Prabha at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5376 or toll free at 1-800-451-6027 extension 4-5376.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emission Calculations
Summary**

Company Name: US Mineral Products Company, Inc (d/b/a Isolatak International)
 Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
 Part 70 Renewal No.: T 069-31651-00021
 Reviewer: Swarna Prabha
 Date: July 14, 2012

Unrestricted Potential Emissions (tons/yr)

Facility	PTE	PTE	PTE	After Controls	After Controls	After Controls	Before Controls	CO2e	Before	Year Installed				
	uncontrolled	uncontrolled	uncontrolled										and After Controls	
	PM	PM10	PM2.5	PM	PM-10	PM2.5	SO2	NOx	H2S	VOC	CO		Carbonyl Sulfide	
Mineral Wool Melters EU-1A and EU-2A	1060.32	974.67	974.67	1.06	0.97	0.97	353.16	109.85	126.23	negl.	0	36,898.30	0	2011
Cupola EU#1	350	350	350	2.10	2.10	2.10	252	50.46	0.00	0.00	7884	-	94.6	<1960
Cupola EU#2	350	350	350	2.10	2.10	2.10	252	50.46	0.00	0.00	7884	30,413.69	94.6	<1960
Blowchamber EU#3	210	210	210	21.0	21.0	21.02	15.2	0.00	0.00	15.8	0.00	0.00	0.00	<1978
Blowchamber EU#4	210	210	210	21.0	21.0	21.02	15.2	0.00	0.00	15.8	0.00	0.00	0.00	<1978
Insignificant gypsum silo EU#9*	0.378	0.242	0.242	0.38	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<1980
Insignificant raw material receiving yard EU#29	2.31	1.10	1.10	2.31	1.10	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<1980
Insignificant batching station EU#30	0.154	0.073	0.073	0.15	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<1980
Cafco Process Line EU#41	299.59	299.59	299.59	3.00	3.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	1980, 1997, 2000
Insignificant debaler EU#13	2.19	2.19	2.19	2.19	2.19	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1980
Insignificant mineral wool bin EU#8	4.38	4.38	4.38	4.38	4.38	4.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1983/84
Front end mineral wool bagger EU#7	21.90	21.90	21.90	0.22	0.22	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1987
Ribbon blender EU#31	8.76	8.76	8.76	0.088	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1988
Insignificant cement silo EU#11*	0.38	0.25	0.25	0.38	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1990
Insignificant PEG 400 tank EU#35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1990
Insignificant Dedust oil Tank (EU#34)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1990
Insignificant Dedust oil Tank (EU#38)	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1990
Insignificant chipped gypsum silo EU#10*	0.378	0.242	0.242	0.38	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1991
Batch blender EU#12	21.9	21.9	21.9	0.219	0.219	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1993
Insignificant mineral wool baler EU#5	5.26	5.26	5.26	5.26	5.26	5.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2005
Automatic bagger at the Cafco Process Line EU#21	0.939	0.329	0.329	0.188	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2007
Classifier Line EU#33 (Attrition mill, Separator, bagger)	21.900	21.900	21.900	0.219	0.219	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2010
Slag Cement silo EU#32*	1.703	1.088	1.088	1.703	1.09	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2010
Combustion sources	0.146	0.146	0.146	0.146	0.146	0.146	0.01	1.92	0.00	0.11	1.61	2316.14	0.00	
Two (2) parts washers	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.34	0.00	0.00	0.00	2012
Welding	0.157	0.157	0.157	0.157	0.157	0.16	0.00	0.00	0.00	0.00	0.00	11.61	0.00	2012
Ink Jet Printer	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	2012
Paved Roads	4.27	0.85	0.21	3.90	0.78	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2012
Total	2,577.53	2,485.82	2,485.17	72.58	67.23	67.23	888.2	212.7	126.2	37.2	15,769.61	69,639.74	189	

Emissions from only one (1) of the three (3) silos are counted towards the total because the annual throughput at the silos is constricted by the throughput at the Cafco Process Line to 105,120 tons per year (12 tons per hour x 8,760 hrs/yr), total. Emissions are after control by the integral baghouses on the silos.

* These emission units have integral controls

**Appendix A: Emission Calculations
Summary**

Company Name: **US Mineral Products Company, Inc (d/b/a Isolatek International)**
 Address City IN Zip: **701 North Broadway Street, Huntington, Indiana 46750**
 Part 70 Renewal No.: **T 069-31651-00021**
 Reviewer: **Swarna Prabha**
 Date: **July 14, 2012**

Limited Potential to Emit (tons/yr)

Facility	PTE	PTE	PTE	PTE	PTE	PTE	PTE	PTE	PTE	PTE	PTE	Year Installed
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Carbonyl Sulfide	H2S	CO2e		
Mineral Wool Melters EU-1A and EU-2A	4.82	14.63	9.77	284.04	88.35	0	0	0.00	101.25	36,898.30		
Cupola EU#1	2.19	2.19	2.19	252	50.5	0.00	7884.0	94.6	0.0	-	<1960	
Cupola EU#2	2.19	2.19	2.19	252	50.5	0.00	7884.0	94.6	0.0	30,413.69	<1960	
Blowchamber EU#3	45.6	45.6	45.55	15.2	0.00	15.8	0.00	0.00	0.00	0.00	<1978	
Blowchamber EU#4	45.6	45.6	45.6	15.2	0.00	15.8	0.00	0.00	0.00	0.00	<1978	
Pre-Aug. 7, 1977 total	100.3	110.1	110.11	535	101	31.5	15,768.00	189	0	0		
Insignificant gypsum silo EU#9*	22.5	13.8	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<1980	
Insignificant raw material receiving yard EU#29	2.31	1.10	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<1980	
Insignificant batching station EU#30	0.154	0.073	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<1980	
Pre-1980 modification total	24.9	14.97	14.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Caico Process Line EU#41	22.8	12.8	12.79	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1980, 1997, 2000	
Insignificant debaler EU#13	2.19	2.19	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1980	
1980 modification total	24.97	14.98	14.98	0.00	0.00	2.00	0.00	0.00	0.00	0.00		
Insignificant mineral wool bin EU#8	4.38	4.38	4.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1983/84	
Front end mineral wool bagger EU#7	21.9	14.98	14.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1987	
Ribbon blender EU#31	8.76	8.76	8.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1988	
Insignificant cement silo EU#11*	24.97	14.98	14.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1990	
Insignificant PEG 400 tank EU#35	0.0	0.0	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1990	
Insignificant Dedust oil Tank (EU#34)	0.000	0	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1990	
Insignificant Dedust oil Tank (EU#38)	0.000	0	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1990	
Insignificant chipped gypsum silo EU#10*	24.97	14.98	14.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1991	
Batch blender EU#12	21.9	14.98	14.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1993	
Insignificant mineral wool baler EU#5	5.256	5.256	5.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2005	
Automatic bagger at the Caico Process Line EU#21	0.939	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2007	
Classifier Line EU#33 (Attrition mill, Separator, bagger)	21.90	21.90	21.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2010	
Slag Cement silo EU#32*	24.97	14.98	14.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2010	
Combustion sources	0.146	0.146	0.146	0.01	1.92	0.11	1.61	0.00	0.00	2316.14		
Two (2) parts washers	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00	2012	
Welding	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	11.61	2012	
Ink Jet Printer	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	2012	
paved Roads	3.90	0.78	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total	319.2	271.3	265.8	819.1	191.2	37.2	15,769.61	189.2	101.25	39,226.04		

Values that are limits in the permit are italicized and Hi-lighted.

The PM from the cupolas and blowchambers is limited by 326 IAC 6-3. The PM and PM10 from the other processes are limited in order to render 326 IAC 2-2 not applicable. Since PM10 is equal to PM for the cupolas and blowchambers, the PTE of PM10 is set equal to the PTE of PM.

* These emission units have integral controls
 PM2.5 is set equal to PM10

Appendix A: Emission Calculations
Emission Units EU-1A and EU-2A
(PM, PM10, PM2.5, SO2, NOx, VOC, CO, COS, H2S)

Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Heat Input Capacity (each Melter) 21.60 MMBtu/hr or 0.0216 MMscf/hr
 Mineral Feed Melt (each Melter) 5.50 ton/hr
 Limited Mineral Feed Melt (combined) 77,500 tpy

	Potential to Emit					
	PM	PM10	PM2.5	¹⁾ SO2	¹⁾ NOx	H2S
Emission Factor (lb/ton feed)	22.00	20.20	20.20	7.33	2.28	2.62
Emission Factor (lb/MMscf)	1.90	7.60	7.60	0.00	0.00	0.00
	Potential to Emit (PTE)					
Melters EU-1A & EU-2A (lb/hr) (feed)	242.00	222.20	222.20	80.63	25.08	28.82
Melters EU-1A & EU-2A (lb/hr) (combustion)	0.08	0.33	0.33	0.00	0.00	0.00
Melters EU-1A & EU-2A (lb/hr)	242.08	222.53	222.53	80.63	25.08	28.82
Melters EU-1A & EU-2A (tpy)	1060.32	974.67	974.67	353.16	109.85	126.23
	Controlled Potential to Emit (PTE)					
Melters EU-1A & EU-2A (lb/hr)	0.24	0.22	0.22	--	--	--
Melters EU-1A & EU-2A (tpy)	1.06	0.97	0.97	--	--	--
	Limited Potential to Emit (PTE)					
Melters EU-1A & EU-2A (lb/hr)	1.10	3.34	2.23	n/a	n/a	
Melters EU-1A & EU-2A (tpy)	4.82	14.63	9.77	284.04	88.35	101.53

¹⁾ Emissions from the combustion of natural gas are included in the emission factor (lb/ton feed).

NOx emission factor is based on testing at a similar facility (Knauf Insulation, Slovenia).

SO2 emission factor is derived by subtracting from the AP-42 SO2 Emission factor (lb/ton feed) the SO2 emissions associated with the use of coke as a fuel, adding the SO2 emissions due to combustion of natural gas, and adding the SO2 emissions from the use of coke as a raw material.

²⁾ Although AP-42 Chp. 11.18 (Mineral Wool Manufacturing) references an emission factor (lb/ton feed) for CO, the chapter also states the CO emissions result from the combustion of coke as a fuel. Since the melters are NG fired, this emission factor is not applicable to the melters.

³⁾ COS = Carbonyl Sulfide (HAP)

Methodology:

a. Potential to Emit (PTE (lb/hr))

$$\begin{aligned} \text{PM, PM10, PM2.5} &= [\text{Emission Factor (lb/ton feed)} \times 5.50 \text{ (ton feed/hr/melter)} \times 2 \text{ melters}] \\ &+ [\text{Emission Factor (lb/MMscf)} \times 0.0216 \text{ (MMscf/hr/melter)} \times 2 \text{ melters}] \\ \text{SO2, NOx, H2S} &= \text{Emission Factor (lb/ton feed)} \times 5.50 \text{ (ton feed/hr/melter)} \times 2 \text{ melters} \end{aligned}$$

b. Potential to Emit (PTE (tpy))

$$\text{All pollutants} = \text{PTE (lb/hr)} \times 8,760 \text{ (hrs/yr)} \times 1/2000 \text{ (lb/ton)}$$

c. Controlled PTE (lb/hr)

$$\begin{aligned} \text{PM, PM10, PM2.5} &= [\text{Emission Factor (lb/ton feed)} \times 77,500 \text{ (ton feed/yr)} \times 1/2000 \text{ (lb/ton)}] \times (1-99.9\%) \\ &+ [\text{Emission Factor (lb/MMscf)} \times 0.0216 \text{ (MMscf/hr/melter)} \times 2 \text{ melters} \times 8,670 \text{ (day/yr)} \times 1/2000 \text{ (lb/ton)}] \times (1-99.9\%) \end{aligned}$$

d. Controlled PTE (tpy)

$$\text{PM, PM10, PM2.5} = \text{PTE (lb/hr)} \times 8,760 \text{ (hrs/yr)} \times 1/2000 \text{ (lb/ton)}$$

e. Limited PTE (tpy)

$$\begin{aligned} \text{PM, PM10, PM2.5} &= \text{Emission Factor (lb/hr)} \times 8760 \text{ (hr/yr)} \times 1/2000 \text{ (lb/ton)} \\ \text{SO2, NOx, H2S} &= \text{Emission Factor (lb/ton feed)} \times 77,500 \text{ (ton feed/yr)} \times 1/2000 \text{ (lb/ton)} \end{aligned}$$

**Appendix A: Emission Calculations
(Greenhouse Gas)**

Company Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: 7/14/2012

1. GHG from Natural Gas Firing Melters

Combustion Unit ID	Process Rate Natural Gas (NG) (scf/yr)	NG Heating Value (MMBtu/scf)	Total Heat Input (MMBtu/yr)
Melter #1 (EU-1A)	315,360,000.00	0.001	315,360.00
Melter #2 (EU-2A)	315,360,000.00	0.001	315,360.00

Combustion Unit ID	CO2 Emissions		Methane: CO2 Equivalent Emissions				Nitrous Oxide: CO2 Equivalent Emissions				Total GHG Emissions (ton/yr)
	Emission Factor (EF) (kg CO2/MMBtu)	CO2 (ton/yr)	Emission Factor (EF) (kg CH4/MMBtu)	CH4 (tpy)	GWP	CO2e (ton/yr)	Emission Factor (EF) (kg N2O/MMBtu)	N2O (ton/yr)	GWP	CO2e (ton/yr)	
Melter #1 (EU-1A)	53.02	18,431.07	0.001	0.35	21	7.30	0.0001	0.03	310	10.78	18,449.15
Melter #2 (EU-2A)	53.02	18,431.07	0.001	0.35	21	7.30	0.0001	0.03	310	10.78	18,449.15
PTE for Melter #1 & Melter #2											36,898.30

2. GHG Emissions from Cupolas

Combustion Unit ID	Process coke Throughput (tpy)	Coke Heating Value (MMBtu/ton)	Total Heat Input (MMBtu/yr)
Cupola #1 (EU #1)	5,414.00	24.80	134,267.20
Cupola #2 (EU #2)	5,414.00	24.80	134,267.20

Combustion Unit ID	CO2 Emissions		Methane: CO2 Equivalent Emissions				Nitrous Oxide: CO2 Equivalent Emissions				Total GHG Emissions (ton/yr)
	Emission Factor (EF) (kg CO2/MMBtu)	CO2 (ton/yr)	Emission Factor (EF) (kg CH4/MMBtu)	CH4 (tpy)	GWP	CO2e (ton/yr)	Emission Factor (EF) (kg N2O/MMBtu)	N2O (ton/yr)	GWP	CO2e (ton/yr)	
Y1 (4/1/2006 to 3/31/2007)											
Cupola #1 (EU #1)	102.04	15,102.35	0.01	1.48	21	31.08	0.0016	0.24	310	73.41	15,206.85
Cupola #2 (EU #2)	102.04	15,102.35	0.01	1.48	21	31.08	0.0016	0.24	310	73.41	15,206.85
Y2 (4/1/2007 to 3/31/2008)											

Total PTE Cupola EU#1 and EU #2 30,413.69

Methodology:

Total Heat Input (MMBTU/yr) = Process Coke Throughput (tpy) * Coke Heating Value (MMBtu/ton)
CO2, CH4, N2O (tpy) = CO2 (EF) (kg CO2/MMBtu) * Total Heat Input (MMBtu/yr) * 1/907.1847 (ton/kg)
Methane as CO2e (tpy) = CH4 (tpy) * GWP (Methane)
Nitrous Oxide as CO2e (tpy) = N2O (tpy) * GWP (Nitrous Oxide)
Total GHS Emissions (tpy) = CO2 (tpy) + Methane as CO2e (tpy) + Nitrous Oxide as CO2e (tpy)

**Appendix A: Emission Calculations
Cupolas EU#1 and EU#2**

Company Name: US Mineral Products Company, Inc (d/b/a Isolotek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Unit		Cupola #1						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	5.0	16.0	80.0	350.4	99.4%	0.480	2.10	AP-42 Table 11.18-2, July 1993
PM-10	5.0	16.0	80.0	350.4	99.4%	0.480	2.10	AP-42 Table 11.18-2, July 1994
PM-2.5	5.0	16.0	80.0	350.4	99.4%	0.480	2.10	AP-42 Table 11.18-2, July 1994
SO ₂	7.2	8.0	57.60	252.29	0.0%	57.600	252.29	AP-42 Table 11.18-4, July 1993
NO _x	7.2	1.6	11.52	50.46	0.0%	11.520	50.46	AP-42 Table 11.18-6, July 1993
VOC	7.2	0.0	0.00	0.00	0.0%	0.000	0.00	
CO	7.2	250.0	1800.00	7884.00	0.0%	1800.000	7884.00	AP-42 Table 11.18-4, July 1993
Carbonyl Sulfide	7.2	3.0	21.60	94.61	0.0%	21.600	94.608	AP-42 Table 11.18-6, July 1993

Emission Unit		EU#2 Cupola #2						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	5.0	16.0	80.0	350.4	99.4%	0.480	2.10	AP-42 Table 11.18-2, July 1993
PM-10	5.0	16.0	80.00	350.40	99.4%	0.480	2.10	AP-42 Table 11.18-2, July 1994
PM-2.5	5.0	16.0	80.00	350.40	99.4%	0.480	2.10	AP-42 Table 11.18-2, July 1994
SO ₂	7.2	8.0	57.60	252.29	0.0%	57.600	252.29	AP-42 Table 11.18-4, July 1993
NO _x	7.2	1.6	11.52	50.46	0.0%	11.520	50.46	AP-42 Table 11.18-6, July 1993
VOC	7.2	0.0	0.00	0.00	0.0%	0.000	0.00	
CO	7.2	250.0	1800.00	7884.00	0.0%	1800.000	7884.000	AP-42 Table 11.18-4, July 1993
Carbonyl Sulfide	7.2	3.0	21.6	94.608	0.0%	21.6	94.608	AP-42 Table 11.18-6, July 1993

Emission factors for PM and PM10 are in lb/ton product, while the other emission factors are in lbs/ton feed.

Blowchambers- EU#3 and EU#4

Emission Unit		EU#3 Blowchamber #1						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	4.0	12.0	48.0	210.2	90.0%	4.800	21.02	AP-42 Table 11.18-2, July 1993
PM-10	4.0	12.0	48.00	210.24	90.0%	4.800	21.02	AP-42 Table 11.18-2, July 1994
PM-2.5	4.0	12.0	48.00	210.24	90.0%	4.800	21.02	AP-42 Table 11.18-2, July 1994
SO ₂	4.0	0.87	3.48	15.24	0.0%	3.480	15.24	AP-42 Table 11.18-4, July 1993 corrected January 200
NO _x	4.0	0.0	0.00	0.00	0.0%	0.000	0.00	AP-42 Table 11.18-6, July 1993
VOC	4.0	0.9	3.60	15.77	0.0%	3.600	15.77	SCC 3-05-017-03, FIRE 6.25
CO	4.0	0.0	0.00	0.00	0.0%	0.000	0.000	AP-42 Table 11.18-4, July 1993

Emission Unit		EU#4 Blowchamber #2						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	4.0	12.0	48.0	210.2	90.0%	4.800	21.02	AP-42 Table 11.18-2, July 1993
PM-10	4.0	12.0	48.00	210.24	90.0%	4.800	21.02	AP-42 Table 11.18-2, July 1994
PM-2.5	4.0	12.0	48.00	210.24	90.0%	4.800	21.02	AP-42 Table 11.18-2, July 1994
SO ₂	4.0	0.87	3.48	15.24	0.0%	3.480	15.24	AP-42 Table 11.18-4, July 1993 corrected January 200
NO _x	4.0	0.0	0.00	0.00	0.0%	0.000	0.00	AP-42 Table 11.18-6, July 1993
VOC	4.0	0.9	3.60	15.77	0.0%	3.600	15.77	SCC 3-05-017-03, FIRE 6.25
CO	4.0	0.0	0.00	0.00	0.0%	0.000	0.000	AP-42 Table 11.18-4, July 1993

**Appendix A: Emission Calculations
Cafco Process Line (EU#41)**

**Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012**

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lb/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	12.0	5.70	68.4	299.6	99.0%	0.684	2.996
PM-10	12.0	5.70	68.4	299.6	99.0%	0.684	2.996
PM-2.5	12.0	5.70	68.4	299.6	99.0%	0.684	2.996
SO ₂	0.0	0.00	0.00	0.00	0.0%	0.000	0.00
NO _x	0.0	0.00	0.00	0.00	0.0%	0.000	0.00
VOC	0.0	0.00	0.00	0.00	0.0%	0.000	0.00
CO	0.0	0.00	0.00	0.00	0.0%	0.000	0.00

Automatic bagger EU#21 at Cafco Process Line

Process	Process Weight Rate (tons/hr)	Control Efficiency (%)	PM K	PM10 K	PM2.5 K	Moisture Content M (%)	Mean Wind Speed U (miles/hr)	PM Emission E (lbs/ton)	PM10 Emission Factor E (lbs/ton)	PM2.5 Emission E (lbs/ton)
Automatic bagger (EU#21) at Cafco Process Line (EU#41)	12	80%	1	0.35	0.053	0.25	2.00	0.018	0.006	0.001
	PTE PM before Control (lbs/hr)	PTE PM before Control (tons/yr)	PTE PM10 before Control (lbs/hr)	PTE PM10 before Control (tons/yr)	PTE PM2.5 before Control (tons/yr)	PTE PM after control (lbs/hr)	PTE PM after control (tons/yr)	PTE PM10 after Control (lbs/hr)	PTE PM10 after Control (tons/yr)	PTE PM2.5 after Control (tons/yr)
	0.214	0.939	0.075	0.329	0.050	0.043	0.188	0.015	0.066	0.010

Emission factors for the automatic bagger are calculated based on AP-42, 13.2.4.3 for a drop operation

$$E = k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$$

In 2007, a manual bagger was replaced by an automatic bagger with its own control device. Although bagging is part of the Cafco Process Line, emissions are calculated separately so that the emission factor for the Cafco Process Line can be evaluated with a single test, and so that IDEM can determine whether approval was required for the automatic bagger.

VOC Emissions EU#34, EU#38, EU#35

	Usage (gal/yr)	Weight % VOC	Weight % HAPs	PTE VOC (tons/yr)	PTE HAPs (tons/yr)
Dedust oil tank (EU#34)	133165	100%	0%	1.00	0.00
Dedust oil tank (EU#38)	133165	100%	0%	1.00	0.00
PEG400 tank (EU#35)	33429	100%	0%	1.00	0.00

VOC emissions are conservatively estimated emissions based on the emission rates calculated using EPA Tanks 4.0.9.

**Appendix A: Emission Calculations
EU#7, Batch Blender EU#12, EU#31**

Company Name: **US Mineral Products Company, Inc (d/b/a Isolatek International)**
 Address City IN Zip: **701 North Broadway Street, Huntington, Indiana 46750**
 Part 70 Renewal No.: **T 069-31651-00021**
 Reviewer: **Swarna Prabha**
 Date: **July 14, 2012**

**Emission Unit EU#7
Front End Mineral Wool Bagger**

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	5.0	1.00	5.00	21.9	99.0%	0.050	0.219
PM-10	5.0	1.00	5.00	21.9	99.0%	0.050	0.219

**Emission Unit 1
Batch Blender EU#12**

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	5.0	1.00	5.00	21.9	99.0%	0.050	0.219
PM-10	5.0	1.00	5.00	21.9	99.0%	0.050	0.219

Emission Unit Ribbon Blender EU#31

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	2.0	1.00	2.00	8.76	99.0%	0.020	0.088
PM-10	2.0	1.00	2.00	8.76	99.0%	0.088	0.384

The emission factors for these processes were approved in the initial Title V permit and are based on measurement at CE#5, controlling emissions from EU#7, and CE#6, controlling emissions from EU#12.

Silos - With Integral Control Devices

**Emission Unit EU#9
Gypsum Silo**

Pollutant	Maximum Rate (tons/hr)	Maximum Rate (tons/yr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	54.0	105120	0.72	38.9	37.8	99.0%	0.389	0.378
PM-10	54.0	105120	0.46	24.8	24.2	99.0%	0.248	0.242

**Emission Unit EU#10
Chip Gypsum Silo**

Pollutant	Maximum Rate (tons/hr)	Maximum Rate (tons/yr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	54.0	105120	0.72	38.9	37.8	99.0%	0.389	0.378
PM-10	54.0	105120	0.46	24.8	24.2	99.0%	0.248	0.242

**Emission Unit EU#11
Cement Silo**

Pollutant	Maximum Rate (tons/hr)	Maximum Rate (tons/yr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	54.0	105120	0.73	39.4	38.4	99.0%	0.394	0.384
PM-10	54.0	105120	0.47	25.4	24.7	99.0%	0.254	0.247

PM and PM10 emission factors for the silos are from WEB FIRE, SCC 3-05-011-07 for cement unloading to elevated storage silo, AP-42. These emission factors were approved for the process in the initial Part 70 Operating Permit. The maximum rate in tons/yr is based on the maximum hourly rate at the Calco Process Line of 12 tons per hour.

**Appendix A: Emission Calculations
Baghouse Operations**

Company Name: US Mineral Products Company, Inc (d/b/a Isolotek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Insignificant Activities

Process	Throughput (lbs/hr)	PM Emission Factor (lbs/ton)	PM10 Emission Factor (lbs/ton)	PTE PM (lbs/hr)	PTE PM10 (lbs/hr)	PTE PM (tons/yr)	PTE PM10 (tons/yr)
Raw Material Receiving Yard (EU#29)	432000	0.00244	0.00116	0.527	0.251	2.308	1.097
Raw Material Batching Station (EU#30)	28800	0.00244	0.00116	0.035	0.017	0.154	0.073
One (1) mineral wool baler (EU#5)	24000	0.1	0.1	1.200	1.200	5.256	5.256
Mineral wool bin (EU#8)	20000	0.1	0.1	1.000	1.000	4.380	4.380
Debaler (EU#13)	10000	0.1	0.1	0.500	0.500	2.190	2.190
Totals:						14.288	12.997

Methodology

Receiving and Batching:

The PM and PM10 emission factors were approved during the initial Title V review and are higher than the emission factors for Truck Unloading of crushed stone (SCC 3-05-020-32)

Balers, debaler and bin:

The PM and PM10 emission factors were approved during the initial Title V review. There are no AP-42 emission factors for these processes.

Appendix A: Emission Calculations
Natural Gas-fired Combustion

Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Heat Input Capacity
 MMBtu/hr

Potential Throughput
 MMCF/yr

4.38

38.37

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
	7.6	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.15	0.15	0.15	1.15E-02	1.9	0.11	1.6

Notes:

*PM10/PM2.5 emission factor is filterable and condensable PM10/PM2.5 combined.

**Emission Factors for NOx: Uncontrolled = 100

All emission factors are based on normal firing.

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 (SUPPLEMENT D 3/98)

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x (8760 hrs/yr) x (1 MMCF/1000 MMBtu)

Pollutant Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) x (1 ton/2000 lbs)

Emission Factor (lb/MMcf)	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emissions (tons/yr)	4.029E-05	2.302E-05	1.439E-03	3.453E-02	6.523E-05

Emission Factor (lb/MMcf)	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emissions (tons/yr)	9.592E-06	2.110E-05	2.686E-05	7.290E-06	4.029E-05

Total HAPs: 3.620E-02

Methodology is the same as above.

Notes:

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

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

Emission Factor (lb/MMcf)	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emissions (tons/yr)	2,302.13	0.04	0.04
Summed Potential Emissions (tons/yr)	2,302.21		
CO2e Total (tons/yr)	2,316.14		

Notes:

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:

Pollutant Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) x (1 ton/2000 lbs)

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O

Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Classifier Line EU#33**

**Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012**

Emission Unit: Classifier Line (Attrition Mill, Separator, and Bagger)

Pollutant	Maximum Rate (tons/hr)	Maximum Rate (tons/yr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	5.0	43,800	1.00	5.00	21.90	99.0	0.05	0.22
PM-10	5.0	43,800	1.00	5.00	21.90	99.0	0.05	0.22

Notes:

PM and PM-10 emission factors are based upon site measurements at the baghouse (CE #5) controlling the Front End Mineral Wool Bagger (EU #7) since these processes are considered identical.

This new PMF Line consists of an Attrition Mill, Separator, and PMF Bagger. All parts of the process are vented to a baghouse (CE #5).

Emission Unit: Slag Cement Silo

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	54.0	0.72	38.88	170.29	99.0	0.39	1.70
PM-10	54.0	0.46	24.84	108.80	99.0	0.25	1.09

Notes:

PM and PM-10 emission factors are based upon WEB FIRE, SCC 3-05-011-07 for cement unloading to elevated storage silo.

There are no emission factors in AP-42 for PM2.5, Therefore PM2.5 = PM10

These emission factors were approved in the Title V Permit Renewal issued 12/27/07.

The slag cement silo has a baghouse unit that is considered "integral to the process".

Appendix A: Emission Calculations
solvent Cleaning operation

Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Surface Coating Operation Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Max. Usage (gals/hr)	VOC Content less water (lbs/gal)	VOC Content (lbs/gal)	PTE VOC (lbs/hr)	PTE VOC (lbs/day)	PTE VOC (tons/yr)	PTE PM/PM10/P M2.5 (tons/yr)	lbs VOC/gal solids	Transfer Efficiency	Control Efficiency	Controlled PTE PM/PM10/P M2.5 (tons/yr)
Parts Washers (2)																	
Safety-Kleen Premium Solvent Mineral Spirits	6.70	100.00%	0.00%	100.00%	0.00%	0.00%	1.16E-02	6.70	6.70	0.08	1.86	0.34	0.00	0.00	100%	0%	0.00
Total												0.34	0.00			0.00	

Notes:

Max. Usage value is based upon the actual annual usage of cleaning solvent added to the two maintenance parts washers based upon disposal information from Safety-Kleen multiplied by a 1.5 safety factor to represent a maximum potential scenario.

Physical properties of SafetyKleen cleaning solvent used in the maintenance parts washers are based upon the MSDS.

There are no HAP components in this cleaning solvent.

Methodology:

Max. Usage (gals/hr) = (322 lbs/yr) x (1gal/6.70 lbs) x (1 yr/6240 hrs operation) x SF (1.5)

Pounds of VOC per Gallon Coating less Water = Density (lbs/gal) x Weight % Organics x 1/ (1-Volume % Water)

Pounds of VOC per Gallon Coating = Density (lbs/gal) x Weight % Organics

PTE VOC (lbs/hr) = Pounds of VOC per Gallon Coating (lbs/gal) x Max. Usage (gals/hr)

PTE VOC (lbs/day) = Pounds of VOC per Gallon Coating (lbs/gal) x Max. Usage (gal/hr) x (24 hrs/day)

PTE VOC (tons/yr) = Pounds of VOC per Gallon Coating (lbs/gal) x Max. Usage (gal/hr) x (8760 hrs/yr) x (1 ton/2000 lbs)

PTE PM/PM10 (tons/yr) = Density (lbs/gal) x Max. Usage (gals/hr) x (1- Weight % Volatiles) x (1-Transfer Efficiency%) x (8760 hrs/yr) x (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) x Weight % Organics) / (Volume % Solids)

Isolatek International
Appendix A: Emission Calculations
 Welding Emissions
 March 2012
Welding Stations

Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

PROCESS	Number of Stations	Max. Electrode Consumption per Station (lbs/hr)		EMISSION FACTORS (lb pollutant/lb electrode)				PTE (tons/yr)			
				PM=PM10=PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr
Welding Operations											
Metal Inert Gas (MIG)(carbon steel)	2	0.5769		0.0241	0.000034	NA	0.00001	0.12	0.000	0.000	0.000
Tungsten Inert Gas (TIG)(carbon steel)	0	0		0.0055	0.0005	NA		0.00	0.000	0.000	0.000
Flame Cutting Operations											
	Number of Stations	Max. Metal Thickness Cut (in)	Max. Metal Cutting Rate (in/min)	EMISSION FACTORS (lb pollutant/1000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)			
				PM=PM10=PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr
Oxyactylene	1	0.6	6	0.1622	0.0005	0.0001	0.0003	0.04	0.000	0.000	0.000
Plasma**	0	0.0	0.0	0.0039				0.00	0.000	0.000	0.000
Totals								0.16	0.000	0.000	0.000

Notes:

Max. Electrode Consumption per Station value is based upon the actual annual usage of welding wire multiplied by a safety factor of 1.5 to represent a maximum potential scenario.

TIG welding emission factors are from an internal training session document.

MIG welding emission factors are from AP 42, Chapter 12-19, Tables 12-19.1 and 12-19.2 (SCC 3-09-052-26) January 1995.

MIG welding emissions include all MIG units, projection welders, and seam welders. Facility uses a hardfacing metal-cored submerged arc (SAW) welding process (wire and flux). MIG welding emission factors used to represent a maximum emissions scenario for the welding process.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in/m) x (1000 in) = 0.0039 lb/1000 in cut, 8 mm thick

Methodology:

Max. Electrode Consumption per Station (lbs/hr) = (4,800 lbs welding wire/yr) x (1yr/6240 hrs operation) x (1 yr/6240 hrs operation) x (1/2 stations) x SF (1.5)

PTE (tons/yr) = Number of Stations x Max. Electrode Consumption (lbs/hr) x Emission Factor (lbs /lb electrode) x (8760 hrs/yr) x (1 ton/2000 lbs)

Plasma Cutting Emissions (lbs/hr) = Number of stations x Max. Cutting Rate (in/min) x (60 min/hr) x Emission Factor (lb pollutant/1000 in cut, 8 mm thick)

Flame Cutting Emissions (lbs/hr) = Number of stations x Max. Metal Thickness Cut (in) x Max. Metal Cutting Rate (in/min) x (60 mins/hr) x Emission Factor (lb pollutant/1000 in cut, 1

Welding Emissions (lbs/hr) = Number of Stations x Max. Electrode Consumption (lbs of electrode used/hr/station) x Emission Factor (lb pollutant/lb of electrode us

Pollutant Emissions (lbs/day) = Process Emissions (lbs/hr) x (24 hrs/day)

Pollutant Emissions (tons/yr) = Process Emissions (lbs/hr) x (8760 hrs/year) x (1 ton/2000 lbs)

Welding
 PTE GHG Emission Calculations

Source	Actual Volume Consumed (ft ³ /yr)	Actual Volume Consumed (m ³ /yr)	Maximum Volume Consumed (m ³ /yr)	Emission Factor (kg CO ₂ /m ³)	CO ₂ Emissions (kg/yr)	CO ₂ Emissions (ton/yr)
Acetylene	4,000	113.27	169.90	61.98	10,530.47	11.61
Totals					10,530.47	11.61

Notes:

Actual Volume Consumed is based upon usage estimate provided by facility.

Maximum Annual Volume Consumed is the actual consumption rate multiplied by a safety factor of 1.5 to represent a maximum potential scenario.

Emission Factors are based upon Appendix 1 from a guidance document provided by IDEM from Dacro Industries Inc. called "Voluntary Challenge and Registry Action Plan for Reducing Greenhouse Gas Emissions", October 2004

Methodology:

Actual Volume Consumed (m³/yr) = Actual Volume Consumed (ft³/yr) x (1 ft³/0.0283168466 m³)

Maximum Volume Consumed (m³/yr) = Actual Volume Consumed (m³/yr) x SF (1.5)

CO₂ Emissions (kg/yr) = Maximum Volume Consumed (m³/yr) x Emission Factor (kg CO₂/m³)

CO₂ Emissions (ton/yr) = CO₂ Emissions (kg/yr) x (0.00110231131092 tons/1 kg)

Appendix A: Emission Calculations
Baghouse Operations

Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Printing Operation	Max. Ink Usage (gals/yr)	Density (lbs/gal)	Max. Ink Usage (lbs/yr)	VOC (% by wt)	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)
Ink Jet Printing	70.0	6.90	483.0	86.96%	420.02	0.21

Notes:

Max. Ink Usage is based upon the maximum anticipated annual ink usage based upon usage information from the facility.
Physical properties of ink used in the automated product ink jet printer are based upon the MSDS.
There are no HAP components in this ink product.

Methodology:

Max. Ink Usage (lbs/yr) = Max. Ink Usage (gals/yr) x Density (lbs/gal)
PTE of VOC (lbs/yr) = Max. Ink Usage (lbs/yr) x VOC (% by wt)
PTE of VOC (tons/yr) = Max. Ink Usage (lbs/yr) x VOC (% by wt) x (1 ton/2000 lbs)

Appendix A: Emission Calculations
Paved Roads

Company Name: US Mineral Products Company, Inc (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Part 70 Renewal No.: T 069-31651-00021
Reviewer: Swarna Prabha
Date: July 14, 2012

Paved Roads at Industrial Site

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

Vehicle Information (conservative estimates provided by source)

Type	Maximum number of vehicles per day	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)
Passenger vehicles (entering plant) (one-way trip)	25.0	1.0	25.0	2.5	62.5	900	0.170	4.3	1,555.4
Passenger vehicles (leaving plant) (one-way trip)	25.0	1.0	25.0	2.5	62.5	900	0.170	4.3	1,555.4
Delivery vans (entering plant) (one-way trip)	15.3	1.0	15.3	4.0	61.1	1,100	0.208	3.2	1,161.9
Delivery vans (leaving plant) (one-way trip)	15.3	1.0	15.3	4.0	61.1	1,100	0.208	3.2	1,161.9
Dump trucks (entering plant) (one-way trip)	1.6	1.0	1.6	40.0	64.0	1,100	0.208	0.3	121.7
Dump trucks (leaving plant) (one-way trip)	1.6	1.0	1.6	40.0	64.0	1,100	0.208	0.3	121.7
Tanker trucks (entering plant) (one-way trip)	0.4	1.0	0.4	50.0	21.5	1,200	0.227	0.1	35.7
Tanker trucks (leaving plant) (one-way trip)	0.4	1.0	0.4	50.0	21.5	1,200	0.227	0.1	35.7
Total			84.6		418.2			15.8	5,749.3

Average Vehicle Weight Per Trip = $\frac{4.9}{1}$ tons/trip
Average Miles Per Trip = $\frac{0.19}{1}$ miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	4.9	4.9	4.9	tons = average vehicle weight (provided by source)
sL =	70	70	70	g/m ² = silt loading value for paved roads at sand and gravel processing facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
where p = $\frac{125}{365}$ 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, E_f =	2.681	0.536	0.1316	lb/mile
Mitigated Emission Factor, E_{ext} =	2.451	0.490	0.1203	lb/mile
Dust Control Efficiency =	0%	0%	0%	(pursuant to control measures outlined in fugitive dust control plan)

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)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Passenger vehicles (entering plant) (one-way trip)	2.08	0.42	0.10	1.91	0.38	0.09	1.91	0.38	0.09
Passenger vehicles (leaving plant) (one-way trip)	2.08	0.42	0.10	1.91	0.38	0.09	1.91	0.38	0.09
Trucks (entering plant) (one-way trip)	0.05	0.01	0.00	0.04	0.01	0.00	0.04	0.01	0.00
Trucks (leaving plant) (one-way trip)	0.05	0.01	0.00	0.04	0.01	0.00	0.04	0.01	0.00
	4.27	0.85	0.21	3.90	0.78	0.19	3.90	0.78	0.19

Notes:

Vehicle information provided by facility and is based upon the maximum estimated quantity of passenger vehicles, delivery vans, dump trucks, and tanker trucks entering the facility on a daily basis. The majority of roads that cars and trucks use when accessing the facility are asphalt, although there are some gravel lots where truck trailers are parked. The maximum one-way distance values are obtained from the site layout drawing and are based upon estimated distances from Broadway Street to shipping, parking, and raw material storage areas.

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)



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: Jakub Tomaszewski
US Mineral Products Company d/b/a Isolatek International
701 N Broadway St
Huntington, IN 46750

DATE: December 7, 2012

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

SUBJECT: Final Decision
Title V
069-31651-00021

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:
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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(317) 232-8603
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December 7, 2012

TO: Huntington Twp Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: US Mineral Products Company d/b/a Isolatek International

Permit Number: 069-31651-00021

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	CDENNY 12/7/2012 US Mineral Products Company d/b/a Isolatek International 069-31651-00021 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

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1		Jakub Tomaszewski US Mineral Products Company d/b/a Isolatek Interna 701 N Broadway St Huntington IN 46750 (Source CAATS)										
2		Huntington Town Council and Mayors Office 300 Cherry St. Huntington IN 46750 (Local Official)										
3		Huntington County Board of Commissioners 354 N. Jefferson St. Suite 201 Huntington IN 46750 (Local Official)										
4		Frederick & Iva Moore 6019 W 650 N Ligonier IN 46767 (Affected Party)										
5		Ms. Mary Shipley 10968 E 100 S Marion IN 46953 (Affected Party)										
6		Mr. Joseph VanCamp Cornerstone Environmental 312 E Diamond St. Kendallville IN 46755 (Consultant)										
7		Huntington County Health Department 354 N. Jefferson Street, Suite 201 Huntington IN 46750 (Health Department)										
8		Melvin & Deborah Gillespie 5616 N 200 E Huntington IN 46750 (Affected Party)										
9		Mount Etna Town Council 5900 West 582 South Huntington IN 46750 (Local Official)										
10		Huntington Public Library 255 West Park Drive Huntington IN 46750 (Library)										
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