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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 15, 2011

RE: U.S. Mineral Products Company dba Isolatek International / 069-30891-00021

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 according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

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

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

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

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

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

Enclosures
FNPER.dot12/03/07

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

Mr. Tom Lund
U.S. Mineral Products Company (d/b/a Isolatek International)
701 North Broadway Street
Huntington, IN 46750

December 15, 2011

Re: 069-30891-00021
Significant Source Modification to
Part 70 OP Renewal No.: T 069-18676-00021

Dear Mr. Lund:

U.S. Mineral Products Company (d/b/a Isolatek International) was issued a Part 70 Operating Permit Renewal T 069-18676-00021 on December 27, 2007 for an acoustic and thermal insulation manufacturing source. An application to modify the source was received on September 7, 2011. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

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.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Jenny Acker or extension 2-8253, or dial (317) 232-8253.

Sincerely,

Chrystal A. Wagner, Section Chief
Permits Branch
Office of Air Quality

Attachments
Draft Significant Source Modification No. 069-30891-00021
Technical Support Document (TSD)

JLA

cc: File - Huntington County
Huntington County Health Department

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

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.in.gov/idem

SIGNIFICANT SOURCE MODIFICATION to a 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.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70, Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification No.: 069-30891-00021	
Issued by: Chrystal Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 15,2011

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY 6
A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)] 6
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)] 6
A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] 7
A.4 Part 70 Permit Applicability [326 IAC 2-7-2] 8

SECTION B GENERAL CONDITIONS 9
B.1 Definitions [326 IAC 2-7-1] 9
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)] 9
B.3 Term of Conditions [326 IAC 2-1.1-9.5] 9
B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12] 9
B.5 Severability [326 IAC 2-7-5(5)] 9
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)] 9
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)] 9
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)] 9
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)] 10
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3] 11
B.11 Emergency Provisions [326 IAC 2-7-16] 11
B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12] 13
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5] 14
B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)] 14
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] 14
B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)] 15
B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] 15
B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)] 16
B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5] 16
B.20 Source Modification Requirement [326 IAC 2-7-10.5] 17
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] 17
B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11] 18
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7] 18
B.24 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5] 18
B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6] 19

SECTION C SOURCE OPERATION CONDITIONS 20

Emission Limitations and Standards [326 IAC 2-7-5(1)] 20
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2] 20
C.2 Opacity [326 IAC 5-1] 20
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9] 20
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2] 20
C.5 Fugitive Dust Emissions [326 IAC 6-4] 20
C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5] 20
C.7 Stack Height [326 IAC 1-7] 20
C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M] 21

Testing Requirements [326 IAC 2-7-6(1)] 22
C.9 Performance Testing [326 IAC 3-6] 22

Compliance Requirements [326 IAC 2-1.1-11] 22
C.10 Compliance Requirements [326 IAC 2-1.1-11] 22

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)] 22
C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)] 22
C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] 23

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] 23
C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3] 23
C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68] 24
C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6] 24
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6] 24

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 25
C.17 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] 25
C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3] 25
C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]26

Stratospheric Ozone Protection 28
C.20 Compliance with 40 CFR 82 and 326 IAC 22-1 28

SECTION D.1 FACILITY OPERATION CONDITIONS 29

Emission Limitations and Standards [326 IAC 2-7-5(1)] 29
D.1.1 Prevention of Significant Deterioration (PSD) SO_2 and NO_X Minor Limits [326 IAC 2-2] 29
D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 30

Compliance Determination Requirements 30
D.1.3 Particulate Control [326 IAC 2-7-6(6)] 30
D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] 30

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 31
D.1.5 Visible Emissions Notations 31
D.1.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 31
D.1.7 Broken or Failed Bag Detection 31

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 32
D.1.8 Record Keeping Requirements 32
D.1.9 Reporting Requirements 32

SECTION D.2 FACILITY OPERATION CONDITIONS 33

Emission Limitations and Standards [326 IAC 2-7-5(1)] 33
D.2.1 Particulate [326 IAC 6-3-2] 33
D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 33

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 33
D.2.3 Visible Emissions Notations [40 CFR 64] 33

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]..... 34
D.2.4 Record Keeping Requirements 34

SECTION D.3 FACILITY OPERATION CONDITIONS 35

Emission Limitations and Standards [326 IAC 2-7-5(1)]..... 35
D.3.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2] 35
D.3.2 Particulate [326 IAC 6-3-2] 35
D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 36

Compliance Determination Requirements..... 36
D.3.4 Particulate Control [326 IAC 2-7-6(6)] 36
D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] 36

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 36
D.3.6 Visible Emissions Notations [40 CFR 64] 36
D.3.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64] 36
D.3.8 Broken or Failed Bag Detection 37

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]..... 37
D.3.9 Record Keeping Requirements 37

SECTION D.4 FACILITY OPERATION CONDITIONS 38

Emission Limitations and Standards [326 IAC 2-7-5(1)]..... 38
D.4.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2] 38
D.4.2 Particulate [326 IAC 6-3-2] 38
D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 39

Compliance Determination Requirements..... 39
D.4.4 Particulate Control [326 IAC 2-7-6(6)] 39

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 39
D.4.5 Visible Emissions Notations 39
D.4.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 40
D.4.7 Broken or Failed Bag Detection 40

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]..... 40
D.4.8 Record Keeping Requirements 40

SECTION D.5 FACILITY OPERATION CONDITIONS 42

Emission Limitations and Standards [326 IAC 2-7-5(1)]..... 42
D.5.1 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2] 42
D.5.2 Particulate [326 IAC 6-3-2] 43
D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 43

Compliance Determination Requirements..... 44
D.5.4 Particulate Control [326 IAC 2-7-6(6)] 44

SECTION E.1 FACILITY OPERATION CONDITIONS 45

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)] 45

E.1.1 General Provisions Relating to NESHAP Subpart DDD [326 IAC 20-1] [40 CFR Part 63, Subpart A] 45

E.1.2 NESHAP Subpart DDD Requirements [40 CFR Part 63, Subpart DDD] [326 IAC 20-46] 45

CERTIFICATION 47

EMERGENCY OCCURRENCE REPORT 48

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT 50

Part 70 Quarterly Report 52

Attachments

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(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an acoustic and thermal insulation manufacturing source.

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 Rules Major Source, Section 112 of the Clean Air Act

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) portable 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.

(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), permitted in 2010, including a PMF bagger, separator 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 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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

(a) 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]

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, T 069-18676-00021, 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:

(i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(ii) 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than 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(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.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)(9) be revised in response to an emergency.

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

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

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 T 069-29088-00021 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),(c), or (e) without a prior permit revision, if each of the following conditions is met:

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

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
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),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

(a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.8 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.9 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.10 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.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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.

C.12 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.13 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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval 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 ninety (90) days after the date of issuance of this permit.

The ERP 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) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) 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.14 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.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

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

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

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

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

C.16 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.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(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.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

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

(b) Unless otherwise specified in this permit, 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) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to

utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part 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

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 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 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.)

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

D.1.1 Prevention of Significant Deterioration (PSD) SO_2 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) 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.

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 PM_{10}, 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 SO_2 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 H_2S 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) 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.

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 SO_2, forty (40) tons per year of NO_X, and ten (10) tons per year of H_2S. 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)]

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) In order to comply with Conditions D.1.1, 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) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-1A, the Permittee shall perform SO_2, NO_X, and H_2S testing, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-2A, the Permittee shall perform SO_2, NO_X, and H_2S testing, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-1A, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, utilizing methods approved by the commissioner.

(d) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-2A, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, utilizing methods approved by the commissioner.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(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 melters, 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 and 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 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.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 Requirement [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. This report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION 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:

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

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(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.2.4, 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

(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) portable 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.

(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 PM_{10}. This will limit the potential to emit PM and PM_{10} 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:

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

Within 180 days after issuance of this Part 70 permit renewal, T 069-18676-00021, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM and PM_{10} testing for the facilities at the Cafco Process Line exhausting to the one (1) baghouse, identified as CE#9, and Stack #9, utilizing methods as approved by the Commissioner. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(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

(e) 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.

(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), permitted in 2010, including a PMF bagger, separator 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 PM_{10} from the one (1) front end mineral wool bagger, identified as EU#7, shall be less than 3.42 pounds per hour. This will limit the potential to emit PM_{10} 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 PM_{10} 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 PM_{10} 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 PM_{10} from the PMF Line (EU#33) shall be less than 3.42 pounds per hour. This will limit the potential to emit PM_{10} 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:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = 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, 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 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.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 and 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 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 PM_{10}. This will limit the potential to emit PM and PM_{10} 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 $PM_{10.}$ This will limit the potential to emit PM and PM_{10} 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 $PM_{10.}$ This will limit the potential to emit PM and PM_{10} 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:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = 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:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = 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 baghouse 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 baghouse 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 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

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.: T 069-18676-00021

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 BRANCH
100 North Senate Avenue
MC61-53 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.: T 069-18676-00021

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

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- X 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
- X The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

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.: T 069-18676-00021

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

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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.:	T 069-18676-00021
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.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	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

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).

K 5_1= 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:

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

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).

K_1= Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).

K_2= Conversion factor, 1,000 L/m^3 (28.3 L/ft^3).

K_3= 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:

$HCHO + NH2OH:HCl \rightarrow CH2:NOH + H2O + HCl$

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 ≥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
Significant Modification to a Part 70 Operating Permit

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
First OP Permit Renewal No.:	T 069-18676-00021
Operation Permit Issuance Date:	December 27, 2007
Significant Source Modification No.:	069-30891-00021
Significant Permit Modification No.:	069-30903-00021
Permit Reviewer:	Jenny Acker

Public Notice Information

On November 11, 2011, 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 significant modification to its Part 70 Operating Permit, issued on December 27, 2007. The notice also provided information on how the public could review the proposed permits (SSM 069-30891-00021 and SPM 069-30903-00021) 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 from Saint-Gobain Containers

On November 9, 2011, Jeremy Palin, Cornerstone Environmental, Health and Safety, Inc., on behalf of U.S. Mineral Products Company (d/b/a Isolatek International), submitted comments on the proposed significant modification to Part 70 Operating Permit No. T069-18676-00021.

A summary of the comments and revisions to the permit (**bolded** language has been added, the ~~strikethrough~~ language has been deleted) is as follows:

Comment 1:

In Condition D.1.1, change the PM limit to 1.10 lb/hr, the PM_{10} limit to 3.34 lb/hr, the $PM_{2.5}$ limit to 2.23 lb/hr, the SO_2 limit to 7.33 lb/hr, the NO_X limit to 2.28 lb/hr, and the H_2S limit to 2.62 lb/hr. In addition, in order for the project to remain minor under the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), change the raw material input to 77,500 ton per year.

IDEM, OAQ Response 1:

Condition D.1.1 has been revised as requested. Additionally, the reporting form associated with the raw material input limit has been revised accordingly. The revisions are as follows:

D.1.1 Prevention of Significant Deterioration (PSD) **PM, PM_{10}, $PM_{2.5}$,** SO_2 ~~and~~ NO_X, **and H_2S** 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 ~~0.24~~ **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 ~~0.22~~ **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 ~~0.22~~ **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 PM_{10}, 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 SO_2 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed ~~5.50~~ **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 ~~2.26~~ **2.28** pounds per ton of material feed, each.

(3) The H_2S emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed ~~2.60~~ **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 ~~78,000.0~~ **77,500.0** tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.

(5) 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.

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 SO_2, forty (40) tons per year of NO_X, and ten (10) tons per year of H_2S. Therefore, the requirements of

326 IAC 2-2 (PSD) are rendered not applicable to the natural gas-fired mineral wool melters.

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.:	T 069-18676-00021
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 ~~78,000.0~~ **77,500.0** tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	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: _____

Comments on the Technical Support Document

In addition to the above comments, Jeremy Palin, Cornerstone Environmental, Health and Safety, Inc., on behalf of U.S. Mineral Products Company (d/b/a Isolatek International), submitted a comment specific to the Technical Support Document (TSD) of the significant permitting action.

TSD Comment 1:

The emission calculations need to be updated to reflect the new numbers.

IDEM, OAQ Response 1:

IDEM does not amend the Technical Support Document (TSD) because the technical support material is maintained to document the original review that was placed on public notice. However, the change has been documented in this addendum to the TSD. See Appendix A to this ATSD for specific details.

TSD Comment 2:

On page 2 of the calculations, remove the name of the facility that the NOx emissions result from. Refer to the facility as a similar operation in Slovenia.

IDEM, OAQ Response 2:

IDEM does not amend the Technical Support Document (TSD) because the technical support material is maintained to document the original review that was placed on public notice.

Appendix A: Emission Calculations
Summary Of Emissions Increase
(page 1 of 1)

Company Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Significant Source Modification No. : 069-30891-00021
Significant Permit Modification No. : 069-30903-00021
First OP Permit Renewal No. : T 069-18676-00021
Reviewer: Jenny Acker
Date: 9/13/2011

1. Summary of Emissions Increase

Hybrid Test (tpy)	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_X	H_2S
PTE (tpy) New Units						
PTE of New Units (tpy)	--	--	--	--	--	--
Controlled PTE of New Units (tpy)	--	--	--	--	--	--
Limited PTE of New Units (tpy)	4.82	14.63	9.77	284.04	88.35	101.53
Cupola #1 (EU #1) - Actual to Projected Actual (ATPA) (tpy)						
Actual Emissions (Baseline)	0.35	0.32	0.32	125.71	25.14	47.14
Projected Actuals	0.00	0.00	0.00	0.00	0.00	0.00
ATPA (tpy)	< 0	< 0	< 0	< 0	< 0	< 0
Cupola #2 (EU #2) - Actual to Projected Actual (ATPA) (tpy)						
Actual Emissions (Baseline)	0.33	0.30	0.30	118.68	23.74	44.51
Projected Actuals	0.00	0.00	0.00	0.00	0.00	0.00
ATPA (tpy)	< 0	< 0	< 0	< 0	< 0	< 0
Hybrid Test (tpy)						
PTE of New Units (tpy)	4.82	14.63	9.77	284.04	88.35	101.53
Sum of ATPA Increases (tpy)	< 0	< 0	< 0	< 0	< 0	< 0
Hybrid Test	4.82	14.63	9.77	284.04	88.35	101.53
Significant Levels (tpy)	**25.0**	**15.0**	**10.0**	**40.0**	**40.0**	**10.0**

Netting	--	--	--	SO_2	NO_X	H_2S
PTE (tpy) New Units						
Limited PTE of New Units (tpy)	--	--	--	284.04	88.35	101.53
Cupola #1 (EU #1) - Contemporaneous Emissions (tpy)						
Actual Emissions (Baseline)	--	--	--	125.71	25.14	47.14
Future Allowables	--	--	--	0.00	0.00	0.00
Contemporaneous Decrease	--	--	--	-125.71	-25.14	-47.14
Cupola #2 (EU #2) - Contemporaneous Emissions (tpy)						
Actual Emissions (Baseline)	--	--	--	118.68	23.74	44.51
Future Allowables	--	--	--	0.00	0.00	0.00
Contemporaneous Decrease	--	--	--	-118.68	-23.74	-44.51
PTE of New Units (tpy)	--	--	--	284.04	88.35	101.53
Sum of Cont. Decreases (tpy)	--	--	--	-244.39	-48.88	-91.65
Net Emissions Increase (tpy)	--	--	--	39.65	39.47	9.88
Significant Levels (tpy)	--	--	--	**40.00**	**40.00**	**10.00**

Note: The only modification during the five (5) year contemporaneous window (MSM 069-29476-00021, issued September 26, 2011) did not have any increases or decreases for SO2, NOx, or CO

Appendix A: Emission Calculations
Emissions Increase of Project
(PM, PM10, PM2.5, SO2, NOx, VOC, CO, COS, H2S)
(page 1 of 2)

Company Name: **U.S. Mineral Products Company (d/b/a Isolatek International)**
Address City IN Zip: **701 North Broadway Street, Huntington, Indiana 46750**
Significant Source Modification No. : **069-30891-00021**
Significant Permit Modification No. : **069-30903-00021**
First OP Permit Renewal No. : **T 069-18676-00021**
Reviewer: **Jenny Acker**
Date: **9/13/2011**

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 mission 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))

PM, PM10, PM2.5 = [Emission Factor (lb/ton feed) x 5.50 (ton feed/hr/melter) x 2 melters]
+ [Emission Factor (lb/MMscf) x 0.0216 (MMscf/hr/melter) x 2 melters]
SO2, NOx, H2S = Emission Factor (lb/ton feed) x 5.50 (ton feed/hr/melter) x 2 melters

b. Potential to Emit (PTE (tpy))

All pollutants = PTE (lb/hr) x 8,760 (hrs/yr) x 1/2000 (lb/ton)

c. Controlled PTE (lb/hr)

PM, PM10, PM2.5 = [Emission Factor (lb/ton feed) x 77,500 (ton feed/yr) x 1/2000 (lb/ton)] x (1-99.9%)
+ [Emission Factor (lb/MMscf) x 0.0216 (MMscf/hr/melter) x 2 melters x 8,670 (day/yr) x 1/2000 (lb/ton)] x (1-99.9%)

d. Controlled PTE (tpy)

PM, PM10, PM2.5 = PTE (lb/hr) x 8,760 (hrs/yr) x 1/2000 (lb/ton)

e. Limited PTE (tpy)

PM, PM10, PM2.5 = Emission Factor (lb/hr) x 8760 (hr/yr) x 1/2000 (lb/ton)
SO2, NOx, H2S = Emission Factor (lb/ton feed) x 77,500 (ton feed/yr) x 1/2000 (lb/ton)

Appendix A: Emission Calculations
Emissions Increase of Project
(PM, PM10, PM2.5, SO2, NOx, VOC, CO, COS, H2S)
(page 2 of 2)

2. Existing Emission Units: EU #1 and EU #2

Cupola #1 (EU #1)			Cupola #2 (EU #2)		
Y1 Total Feed:	32,114	ton/yr	Y1 Total Feed:	30,023	ton/yr
Y2 Total Feed:	30,740	ton/yr	Y2 Total Feed:	29,319	ton/yr

	PM	PM10	PM2.5	SO2	NOx	H2S
Emission Factor (lb/ton feed)	22.00	20.20	20.20	8.00	1.60	3.00
Control Efficiency	99.9%	99.9%	99.9%	0.0%	0.0%	0.0%
Cupola #1 (EU #1)						
PTE (tpy): Y1 (4/1/2006 to 3/31/2007)	0.35	0.32	0.32	128.46	25.69	48.17
PTE (tpy): Y2 (4/1/2007 to 3/31/2008)	0.34	0.31	0.31	122.96	24.59	46.11
Actual Emissions (tpy)	**0.35**	**0.32**	**0.32**	**125.71**	**25.14**	**47.14**
Cupola #2 (EU #2)						
PTE (tpy): Y1 (4/1/2006 to 3/31/2007)	0.33	0.30	0.30	120.09	24.02	45.03
PTE (tpy): Y2 (4/1/2007 to 3/31/2008)	0.32	0.30	0.30	117.28	23.46	43.98
Actual Emissions (tpy)	**0.33**	**0.30**	**0.30**	**118.68**	**23.74**	**44.51**

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

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
First OP Permit Renewal No.:	T 069-18676-00021
Operation Permit Issuance Date:	December 27, 2007
Significant Source Modification No.:	069-30891-00021
Significant Permit Modification No.:	069-30903-00021
Permit Reviewer:	Jenny Acker

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.

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 PM2.5.

(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 SO_2 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 SO_2, CO, PM_{10}, NO_2, 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, 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.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	Greater than 250
PM_{10}	Less than 250
$PM_{2.5}$	not calculated
SO_2	Greater than 250
VOC	Less than 250
CO	Greater than 250
NO_X	Less than 250
GHG as CO_2e	not calculated
HAPs	
Carbonyl Sulfide	189
Total	**189**

(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) These emissions are based upon the Technical Support Document (TSD) to Part 70 Operating Permit Renewal No. 069-18676-00021.

(c) 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).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by U.S. Mineral Products Company (d/b/a Isolatek International) on September 9, 2011, relating to the construction of two (2) natural gas-fired mineral wool melters to be identified as EU-1A and EU-2A. These two (2) new melters will replace the existing coke-fired cupolas, identified as EU#1 and EU#2. The following is a list of the proposed 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 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.

Enforcement Issues

There are no pending enforcement actions.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
Stack 1	EU-1A EU-2A	58.00	3.50	46,000.00	250.0

Emission Calculations

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

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE of New Units Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	1060.32
PM_{10}	974.67
$PM_{2.5}$	974.67
SO_2	350.75
VOC	1.04
CO	15.89
NO_X	108.89
Single HAP	<10
Total HAPs	<25

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

This source modification is subject to 326 IAC 2-7-10.5(f)(4) for modifications with a potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants: particulate matter (PM) or particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM_{10}), sulfur dioxide (SO_2), and nitrogen oxide (NO_X).

Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d)(1), because the modification requires significant changes in existing monitoring Part 70 permit terms and conditions.

Permit Level Determination – PSD

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 modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (ton/yr)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO**	**NO_X**	**H_2S**	**GHG**
Melters EU-1A and EU-2A	1.06	0.97	0.97	283.92	1.04	15.89	88.14	101.40	36,894.79
Total Emissions Increase for Modification	**1.06**	**0.97**	**0.97**	**283.92**	**1.04**	**15.89**	**88.14**	**101.40**	**36,894.79**
Significant Level	**25**	**15**	**10**	**40**	**40**	**100**	**40**	**10**	**75,000 CO_2e**

	Potential to Emit (ton/yr)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO**	**NO_X**	**H_2S**	**GHG**
Contemporaneous Increase	n/a	n/a	n/a	0	n/a	n/a	0	0	n/a
Contemporaneous Decrease	n/a	n/a	n/a	-244.39	n/a	n/a	-48.88	-91.66	n/a
Total Net Emissions Increase for Modification	n/a	n/a	n/a	**39.53**	n/a	n/a	**39.26**	**9.75**	n/a
Significant Level	n/a	n/a	n/a	**40**	n/a	n/a	**40**	**10**	n/a

*$PM_{2.5}$ listed is direct $PM_{2.5}$.
"n/a" netting was not required for these pollutants.

This modification to an existing major stationary source is not major because the emissions increase of PM, PM_{10}, $PM_{2.5}$, CO, and VOC and the net emissions increase of SO_2, NO_X, and H_2S are less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(a) Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year, fifteen (15) tons of PM_{10}, and ten (10) tons of $PM_{2.5}$, this source has elected to limit the potential to emit of this modification as follows:

(1) PM emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 0.24 lb/hr, combined.

(2) PM10 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 0.22 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 0.22 lb/hr, combined.

(b) Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than forty (40) tons of SO_2, forty (40) tons of NO_X, and ten (10) tons of H_2S per year, this source has elected to limit the potential to emit of this modification as follows:

(1) The SO_2 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 5.50 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 2.26 pounds per ton of material feed, each.

(3) The H_2S emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.60 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 78,000.0 tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.

(c) This modification would be major under PSD for SO_2 and NO_X, but the source performed a netting analysis to avoid PSD applicability. There were no contemporaneous increases for SO_2 and/or NO_X. There are no previous permitting actions resulting in contemporaneous decreases of SO_2 and NO_X. The

contemporaneous decreases of SO_2 and NO_X will result from the shutdown of the existing two (2) short stack cupolas, identified as EU#1 and EU#2. This source has elected to accept the following limit:

(1) 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.

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 PM_{10}, ten (10) tons per year of $PM_{2.5}$, forty (40) tons per year of SO_2, forty (40) tons per year of NO_X, and ten (10) tons per year of H_2S. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to the natural gas-fired mineral wool melters.

Federal Rule Applicability Determination

NSPS:

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) 40 CFR Part 60, Subpart PPP
This source does not produce insulation material composed of glass fibers made from glass produced or melted at the source. 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.

NESHAP:

(a) 40 CFR Part 63, Subpart DDD
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, are considered new affected cupolas.

Nonapplicable portions of the NESHAP will not be included in the permit. The new 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.

CAM:

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified 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 new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
PM							
Melter EU-1A	BH	326 IAC 2-2	530.16	0.53	100	Y	N
Melter EU-2A	BH	326 IAC 2-2	530.16	0.53	100	Y	N
PM_{10}							
Melter EU-1A	BH	326 IAC 2-2	487.34	0.49	100	Y	N
Melter EU-2A	BH	326 IAC 2-2	487.34	0.49	100	Y	N
$PM_{2.5}$							
Melter EU-1A	BH	326 IAC 2-2	487.34	0.49	100	Y	N
Melter EU-2A	BH	326 IAC 2-2	487.34	0.49	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Melter EU-1A and Metler EU-2A for PM, PM_{10}, and $PM_{2.5}$, upon issuance of the Second Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

State Rule Applicability Determination

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
PSD applicability is discussed under the Permit Level Determination – PSD section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation the natural gas-fired mineral wool melter, identified as EU-1A, and the natural gas-fired mineral wool melter, identified as 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)
The PM emissions 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:
>
> $E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
> P = process weight rate in tons per hour

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, concerning national emission standards for hazardous air pollutants is more stringent than the particulate limitation established in this rule. Therefore, the requirements of 40 CFR 63, Subpart DDD, incorporated by reference under 326 IAC 20-46, are more stringent than 326 IAC 6-3-2. Therefore, 326 IAC 6-3-2 does not apply to the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
(b) The potential to emit SO_2 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.

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 modification are as follows:

Compliance Determination

The two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, have applicable compliance determination conditions as specified below:

(a) Testing Requirements

(a) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-1A, the Permittee shall perform SO_2, NO_X, and H_2S testing.

(b) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-2A, the Permittee shall perform SO_2, NO_X, and H_2S testing.

(c) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-1A, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing.

(d) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-2A, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing.

Testing shall be conducted at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Particulate Control

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.

Compliance Monitoring

The two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, have applicable compliance monitoring conditions as specified below:

(a) Visible Emissions Notations

Visible emission notations of the one (1) baghouse, identified as CE#1 stack exhaust shall be performed once per day during normal daylight operations.

(b) Parametric Monitoring

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 melters, identified as EU-1A and EU-2A, at least once per day when either melter is in operation.

(c) Broken or Failed Bag Detection

The Permittee shall maintain the baghouse and replace broken or failed bags as needed.

These monitoring conditions are necessary because the baghouse for the two (2) natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, must operate properly to ensure compliance with 326 IAC 2-7 (Part 70) and to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T069-18676-00021. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Modification No. 1:

Section A.2 - Emissions Units and Pollutant Control Equipment Summary has been modified to incorporate the proposed melters and reflect 40 CFR Part 63 applicability of the existing cupolas.

Section A.2 has been revised as follows:

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.**

~~(a)~~**(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.**

~~(b)~~**(c)** * * *

~~(c)~~**(d)** * * *

~~(d)~~**(e)** * * *

~~(e)~~**(f)** * * *

~~(f)~~**(g)** * * *

~~(g)~~**(h)** * * *

Modification No. 2:

Section D.1, which was previously reserved, now contains the requirements applicable to the new melters EU-1A and EU-2A.

Section D.1 has been revised as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

~~[RESERVED]~~

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 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.)

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

D.1.1 Prevention of Significant Deterioration (PSD) SO_2 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 0.24 lb/hr, combined.

(2) PM10 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 0.22 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 0.22 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 PM_{10}, 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 SO_2 emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 5.50 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 2.26 pounds per ton of material feed, each.

(3) The H_2S emissions from the natural gas-fired mineral wool melters, identified as EU-1A and EU-2A, shall not exceed 2.60 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 78,000.0 tons per twelve (12) consecutive month period, combined, with compliance determined at the end of each month.

(5) 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.

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 SO_2, forty (40) tons per year of NO_X, and ten (10) tons per year of H_2S. 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)]

(a) In order to comply with Conditions D.1.1, 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) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-1A, the Permittee shall perform SO_2, NO_X, and H_2S testing, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-2A, the Permittee shall perform SO_2, NO_X, and H_2S testing, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-1A, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, utilizing methods approved by the commissioner.

(d) Not later than 180 days after startup of the natural gas-fired melter, identified as EU-2A, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing, utilizing methods approved by the commissioner.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(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 melters, 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 and 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 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.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 Requirement [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. This report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Modification No. 3:

For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition" or other similar language.

Section D.2 has been revised as follows:

SECTION D.2 FACILITY OPERATION CONDITIONS

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

~~(b)~~**(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]

* * *

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

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and 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]

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable **response**. ~~steps in accordance with~~ 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 ~~accordance with Section C- Response to Excursions or Exceedances~~ 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

* * *

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements, of this permit **contains the Permittee's obligation with regard to the records required by this condition**.

Modification No. 4:

For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition." or other similar language.

IDEM will allow the Permittee the option of using manufacturer's recommendations for the calibration frequency.

The word "status" has been added to Section D - Recordkeeping Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

Section D.3 has been revised as follows:

SECTION D.3 FACILITY OPERATION CONDITIONS

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

~~(c)~~**(d)** * * *

(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]

* * *

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

* * *

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

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for 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)]

* * *

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

Within 180 days after issuance of this Part 70 permit renewal, T 069-18676-00021, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM and PM_{10} testing for the facilities at the Cafco Process Line exhausting to the one (1) baghouse, identified as CE#9, and Stack #9, utilizing methods as approved by the Commissioner. PM_{10}

includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**.

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

D.3.6 Visible Emissions Notations [40 CFR 64]

* * *

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

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated **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

* * *

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

D.3.9 Record Keeping Requirements

(a) * * *

(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) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements, of this permit **contains the Permittee's obligation with regard to the records required by this condition**.

Modification No. 5:

For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition" or other similar language.

The word "status" has been added to Section D - Recordkeeping Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

Section D.4 has been revised as follows:

SECTION D.4 FACILITY OPERATION CONDITIONS

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

~~(d)~~**(e)** * * *

~~(e)~~**(f)** * * *

~~(f)~~**(g)** * * *

~~(g)~~**(h)** * * *

(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]

* * *

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

* * *

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

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for 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)]

* * *

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

D.4.5 Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable **response**. ~~steps in accordance with~~ 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 ~~accordance with Section C- Response to Excursions or Exceedances~~ 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 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 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. ~~steps in accordance~~ 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 ~~in accordance with Section C- Response to Excursions or Exceedances~~ shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated **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

* * *

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

D.4.8 Record Keeping Requirements

* * *

(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) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements, of this permit **contains the Permittee's obligation with regard to the records required by this condition**.

Modification No. 6:

For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition" or other similar language.

Section D.5 has been revised as follows:

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]

* * *

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

* * *

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

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for 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)]

* * *

Modification No. 7:

Section E.1 has been modified to incorporate the proposed melters and reflect the applicable requirements of 40 CFR Part 63, Subpart DDD.

Section E.1 has been revised as follows:

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.**

~~(a)~~**(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)~~(1), (b)(2)~~
(5) ~~§~~ **40 CFR** 63.1180(a)(2), **(b),** (c), **and** (d)
(6) ~~§~~ **40 CFR** 63.1181~~(a), (b), (c), (d)~~
(7) **40 CFR 63.1182**
(8) ~~§~~ **40 CFR** 63.1184 ~~(a), (b), (c), (d), (e), (f), (g)(1), (g)(2), (h)~~
(9) **40 CFR 63.1185**
(10) ~~§~~ **40 CFR** 63.1186 ~~(a), (b)~~
(11) ~~§~~ **40 CFR** 63.1187 ~~(a), (b)(1) through (5)~~

(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 ~~(a), (b), (c), (d), (e)~~
(17) ~~§~~ **40 CFR** 63.1193 ~~(a), (b), (c), (d), (e), (f)~~
(18) ~~§~~ **40 CFR** 63.1194
(19) ~~§~~ **40 CFR** 63.1195 ~~(a), (b), (c)~~
(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)**

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 069-30891-00021 and Significant Permit Modification No. 069-30903-00021. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jenny Acker 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) 233-9327 or toll free at 1-800-451-6027 extension 3-9327.

(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 Of Emissions Increase
(page 1 of 1)

Company Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Significant Source Modification No. : 069-30891-00021
Significant Permit Modification No. : 069-30903-00021
First OP Permit Renewal No. : T 069-18676-00021
Reviewer: Jenny Acker
Date: 9/13/2011

1. Summary of Emissions Increase

Hybrid Test (tpy)	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_X	VOC	CO	H_2S	CO_2e
PTE (tpy) New Units									
PTE of New Units (tpy)	--	--	--	--	--	1.04	15.89	--	36,894.80
Controlled PTE of New Units (tpy)	1.06	0.97	0.97	--	--	--	--	--	--
Limited PTE of New Units (tpy)	--	--	--	283.92	88.14	--	--	101.40	--
Cupola #1 (EU #1) - Actual to Projected Actual (ATPA) (tpy)									
Actual Emissions (Baseline)	0.35	0.32	0.32	125.71	25.14	0.00	3,928.38	47.14	15,451.23
Projected Actuals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATPA (tpy)	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0
Cupola #2 (EU #2) - Actual to Projected Actual (ATPA) (tpy)									
Actual Emissions (Baseline)	0.33	0.30	0.30	118.68	23.74	0.00	3,708.88	44.51	15,311.91
Projected Actuals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATPA (tpy)	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0
Hybrid Test (tpy)									
PTE of New Units (tpy)	1.06	0.97	0.97	283.92	88.14	1.04	15.89	101.40	36894.80
Sum of ATPA Increases (tpy)	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0
Hybrid Test	1.06	0.97	0.97	283.92	88.14	1.04	15.89	101.40	36894.80
Significant Levels (tpy)	**25.0**	**15.0**	**10.0**	**40.0**	**40.0**	**40.0**	**100.0**	**10.0**	**75,000.0**

Netting	--	--	--	SO_2	NO_X	--	--	H_2S	--
PTE (tpy) New Units									
Limited PTE of New Units (tpy)	--	--	--	283.92	88.14	--	--	101.40	--
Cupola #1 (EU #1) - Contemporaneous Emissions (tpy)									
Actual Emissions (Baseline)	--	--	--	125.71	25.14	--	--	47.14	--
Future Allowables	--	--	--	0.00	0.00	--	--	0.00	--
Contemporaneous Decrease	--	--	--	-125.71	-25.14	--	--	-47.14	--
Cupola #2 (EU #2) - Contemporaneous Emissions (tpy)									
Actual Emissions (Baseline)	--	--	--	118.68	23.74	--	--	44.51	--
Future Allowables	--	--	--	0.00	0.00	--	--	0.00	--
Contemporaneous Decrease	--	--	--	-118.68	-23.74	--	--	-44.51	--
PTE of New Units (tpy)	--	--	--	283.92	88.14	--	--	101.40	--
Sum of Cont. Decreases (tpy)	--	--	--	-244.39	-48.88	--	--	-91.65	--
Net Emissions Increase (tpy)	--	--	--	39.53	39.26	--	--	9.75	--
Significant Levels (tpy)	--	--	--	**40.00**	**40.00**	--	--	10.00	--

Note: The only modification during the five (5) year contemporaneous window (MSM 069-29476-00021, issued September 26, 2011) did not have any increases or decreases for SO2, NOx, or CO.

Appendix A: Emission Calculations
Emissions Increase of Project
(PM, PM10, PM2.5, SO2, NOx, VOC, CO, COS, H2S)
(page 1 of 2)

Company Name: **U.S. Mineral Products Company (d/b/a Isolatek International)**
Address City IN Zip: **701 North Broadway Street, Huntington, Indiana 46750**
Significant Source Modification No. : **069-30891-00021**
Significant Permit Modification No. : **069-30903-00021**
First OP Permit Renewal No. : **T 069-18676-00021**
Reviewer: **Jenny Acker**
Date: **9/13/2011**

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) 78,000 tpy

	Potential to Emit								
	PM	PM10	PM2.5	1) SO2	1) NOx	VOC	2) CO	3) COS	H2S
Emission Factor (lb/ton feed)	22.00	20.20	20.20	7.28	2.26			2.26	2.60
Emission Factor (lb/MMscf)	1.90	7.60	7.60	0.00	0.00	5.50	84.00	0.00	0.00
	Potential to Emit (PTE)								
Melters EU-1A & EU-2A (lb/hr) (feed)	242.00	222.20	222.20	80.08	24.86	0.00	0.00	24.86	28.60
Melters EU-1A & EU-2A (lb/hr) (combustion)	0.08	0.33	0.33	0.00	0.00	0.24	3.63	0.00	0.00
Melters EU-1A & EU-2A (lb/hr)	242.08	222.53	222.53	80.08	24.86	0.24	3.63	24.86	28.60
Melters EU-1A & EU-2A (tpy)	1060.32	974.67	974.67	350.75	108.89	1.04	15.89	108.89	125.27
	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 (tpy)	--	--	--	283.92	88.14	--	--	88.14	101.40

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 mission 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. PTE (lb/hr)

PM, PM10, PM2.5 = [Emission Factor (lb/ton feed) x 5.50 (ton feed/hr/melter) x 2 melters]
+ [Emission Factor (lb/MMscf) x 0.0216 (MMscf/hr/melter) x 2 melters]
SO2, NOx, COS, H2S = Emission Factor (lb/ton feed) x 5.50 (ton feed/hr/melter) x 2 melters
VOC, CO = Emission Factor (lb/MMscf) x 0.0216 (MMscf/hr/melter) x 2 melters

b. PTE (tpy)

All pollutants = PTE (lb/hr) x 8,760 (hrs/yr) x 1/2000 (lb/ton)

c. Limited PTE (tpy)

PM, PM10, PM2.5 = [Emission Factor (lb/ton feed) x 78,000 (ton feed/yr) x 1/2000 (lb/ton)] x (1-99.9%)
+ [Emission Factor (lb/MMscf) x 0.0216 (MMscf/hr/melter) x 2 melters x 8,670 (day/yr) x 1/2000 (lb/ton)] x (1-99.9%)
SO2, NOx, COS, H2S = [Emission Factor (lb/ton feed) x 78,000 (ton feed/yr) x 1/2000 (lb/ton)]
VOC, CO = Emission Factor (lb/MMscf) x 0.0216 (MMscf/hr/melter) x 2 melters x 8,670 (day/yr) x 1/2000 (lb/ton)

Appendix A: Emission Calculations
Emissions Increase of Project
(PM, PM10, PM2.5, SO2, NOx, VOC, CO, COS, H2S)
(page 2 of 2)

2. Existing Emission Units: EU #1 and EU #2

Cupola #1 (EU #1)

Y1 Total Feed:	32,114	ton/yr
Y2 Total Feed:	30,740	ton/yr

Cupola #2 (EU #2)

Y1 Total Feed:	30,023	ton/yr
Y2 Total Feed:	29,319	ton/yr

	PM	PM10	PM2.5	SO2	NOx	VOC	CO	H2S
Emission Factor (lb/ton feed)	22.00	20.20	20.20	8.00	1.60	0.00	250.00	3.00
Control Efficiency	99.9%	99.9%	99.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Cupola #1 (EU #1)								
PTE (tpy): Y1 (4/1/2006 to 3/31/2007)	0.35	0.32	0.32	128.46	25.69	0.00	4014.25	48.17
PTE (tpy): Y2 (4/1/2007 to 3/31/2008)	0.34	0.31	0.31	122.96	24.59	0.00	3842.50	46.11
Actual Emissions (tpy)	**0.35**	**0.32**	**0.32**	**125.71**	**25.14**	**0.00**	**3,928.38**	**47.14**
Cupola #2 (EU #2)								
PTE (tpy): Y1 (4/1/2006 to 3/31/2007)	0.33	0.30	0.30	120.09	24.02	0.00	3752.88	45.03
PTE (tpy): Y2 (4/1/2007 to 3/31/2008)	0.32	0.30	0.30	117.28	23.46	0.00	3664.88	43.98
Actual Emissions (tpy)	**0.33**	**0.30**	**0.30**	**118.68**	**23.74**	**0.00**	**3,708.88**	**44.51**

Appendix A: Emission Calculations
Emissions Increase of Project
(Greenhouse Gas)
(page 1 of 2)

Company Name: U.S. Mineral Products Company (d/b/a Isolatek International)
Address City IN Zip: 701 North Broadway Street, Huntington, Indiana 46750
Significant Source Modification No. : 069-30891-00021
Significant Permit Modification No. : 069-30903-00021
First OP Permit Renewal No. : T 069-18676-00021
Reviewer: Jenny Acker
Date: 9/13/2011

1. GHG from Natural Gas Firing at New Melters

Combustion Unit ID	Process Rate Natural Gas (NG) (scf/yr)	NG Heating Value (MMBtu/scf)	Total Heat Input (MMBtu/yr)
Cupola #1 (EU #1)	315,360,000.00	0.001	315,360.00
Cupola #2 (EU #2)	315,300,060.00	0.001	315,300.06

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	**18,427.57**	0.001	0.35	21	**7.30**	0.0001	**0.03**	310	**10.78**	**18,445.65**

PTE for Melter #1 & Melter #2 36,894.80

Methodology:

Total Heat Input (MMBTU/yr) = Process Rate (NG) (scf/yr) * NG Heating Value (MMBtu/scf)
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
Emissions Increase of Project
(Greenhouse Gas)
(page 2 of 2)

2. GHG Baseline Emissions from Existing Cupolas

Combustion Unit ID	Process coke Throughput (tpy)	Coke Heating Value (MMBtu/ton)	Total Heat Input (MMBtu/yr)
	Y1 (4/1/2006 to 3/31/2007)		
Cupola #1 (EU #1)	5,476.85	24.80	135,825.88
Cupola #2 (EU #2)	5,351.99	24.80	132,729.35
	Y2 (4/1/2007 to 3/31/2008)		
Cupola #1 (EU #1)	5,525.16	24.80	137,023.97
Cupola #2 (EU #2)	5,512.75	24.80	136,716.20

Combustion Unit	CO2 Emissions		Methane: CO2 Equivalent Emissions				Nitrous Oxide: CO2 Equivalent Emissions				
ID	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)**	**Total GHG Emissions (ton/yr)**
	Y1 (4/1/2006 to 3/31/2007)										
Cupola #1 (EU #1)	102.04	**15,277.67**	0.01	**1.50**	21	**31.44**	0.0016	**0.24**	310	**74.26**	**15,383.38**
Cupola #2 (EU #2)	102.40	**14,982.05**	0.01	**1.46**	21	**30.72**	0.0016	**0.23**	310	**72.57**	**15,085.34**
	Y2 (4/1/2007 to 3/31/2008)										
Cupola #1 (EU #1)	102.04	**15,412.44**	0.01	**1.51**	21	**31.72**	0.0016	**0.24**	310	**74.92**	**15,519.07**
Cupola #2 (EU #2)	102.40	**15,432.07**	0.01	**1.51**	21	**31.65**	0.0016	**0.24**	310	**74.75**	**15,538.47**

Total Actual Emissions Cupola #1 (EU #1) 15,451.23
Total Actual Emissions Cupola #2 (EU #2) 15,311.91

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)

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: Tom Lund
US Mineral Products d/b/a Isolatek International
701 N Broadway St
Huntington, IN 46750

DATE: December 15, 2011

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

SUBJECT: Final Decision
Title V
069-30891-00021

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:
Jeremy Palin (CRA)
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
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

December 15, 2011

TO: Huntington Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: U.S. Mineral Products Company dba Isolatek International
Permit Number: 069-30891-00021

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 12/15/2011 US Mineral Products d/b/a Isolatek International 069-30891-00021 (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**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Tom Lund US Mineral Products d/b/a Isolatek International 701 N Broadway St Huntington IN 46750 (Source CAATS)									
2		Mr. Charles L. Berger Attorney Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 *(Affected Party)*									
3		Huntington Town Council and Mayors Office 300 Cherry St. Huntington IN 46750 *(Local Official)*									
4		Huntington County Board of Commmissioners 354 N. Jefferson St. Suite 201 Huntington IN 46750 *(Local Official)*									
5		Frederick & Iva Moore 6019 W 650 N Ligonier IN 46767 *(Affected Party)*									
6		Ms. Mary Shipley 10968 E 100 S Marion IN 46953 *(Affected Party)*									
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		Mr. Jeremy Palin Conestogg-Rovers and Associates 6520 Coporate Drive Indianapolis IN 46278 *(Consultant)*									
11		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 *(Affected Party)*									
12		Huntington Public Library 255 West Park Drive Huntington IN 46750 *(Library)*									
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877