



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 7, 2011

RE: US Mineral Products (d/b/a/ Isolatek International) / 069-30891I-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

December 7, 2011

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

Re: Interim Significant Source Modification Petition Approval
069-308911-00021

Dear Mr. Lund:

On November 16, 2011, the Office of Air Quality (OAQ) received an interim Significant Source Modification petition from U.S. Mineral Products Company (d/b/a Isolatek International), located at 701 North Broadway Street, Huntington, Indiana for construction of two (2) natural gas-fired mineral wool melters.

A public notice of the interim Significant Source Modification petition was published in The Huntington Herald Press on November 17, 2011. The public comment period ended on November 30, 2011.

There were no comments received during the public comment period. This interim Significant Source Modification petition is in effect upon issuance and will expire on the effective date of the final Significant Source Modification permit.

The interim Significant Source Modification petition may be revoked after the effective date upon a written finding by the Indiana Department of Environmental Management (IDEM) that any of the reasons for denial in 326 IAC 2-13-1(h) exist or if the final Significant Source Modification permit is denied. The IDEM has reviewed this interim Significant Source Modification petition and has not found any such reason. The facilities subject to this approval may not operate until the final Significant Permit Modification is issued by OAQ.

The interim Significant Source Modification petition is federally enforceable. Detailed construction and operation conditions will be specified in the final Significant Source Modification permit 069-308911-00021.

If you have any questions regarding this interim Significant Source Modification petition, please contact Jenny Acker, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Jenny Acker or extension 3-9327, or dial (317) 233-9327.

Sincerely,



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

Enclosure: Interim Permit Evaluation

JLA

U.S. Mineral Products Company
(d/b/a Isolatek International)
Huntington, Indiana
Permit Reviewer: Jenny Acker

Page 2 of 2
Interim Significant Source Mod.: 069-308911-00021

cc: File – Huntington County
Huntington County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

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

Interim Petition Checklist

Instructions: (a) Please answer yes or no.
(b) Enclosed this checklist with the completed interim petition package.

Company Name: Isolatek International

Location: 701 N. Broadway Street, Huntington, Indiana 46750

Yes	1. Is the written interim petition prepared?
Yes	2. Is the written petition signed and dated?
Yes	3. Is the public notice drafted?
Yes	4. Is the filing and review fee enclosed? \$625 for TV, FESOP, and SSOA. \$500 for MSOP.
Yes	5. Is the account number written on the check or money order?
Yes	6. Is the Affidavit of Construction signed, dated, and notarized?
Yes	7. Is the proposed modification/revision described in detail?
Yes	8. Is the proposed modification/revision a modification or addition to an existing source?
Yes	9. Is the proposed modification/revision located in an attainment area for all the criteria pollutants?
No	10. Is the proposed modification/revision located in a nonattainment area? If yes, answer No. 11.
	11. Is the pollutant, which the nonattainment designation is based on, going to be emitted in this proposed modification/revision?
Yes	12. Are potential emissions calculated?
Yes	13. Is federal enforceability consent specifically indicated?
Yes	14. Are specific conditions, limitations, and/or restrictions included that preclude applicability of PSD?
No	15. Are specific conditions, limitations, and/or restrictions included that preclude applicability of NSPS?
No	16. Are specific conditions, limitations, and/or restrictions included that preclude applicability of NESHAP?
Yes	17. Are specific conditions, limitations, and/or restrictions included that assure compliance with all applicable state air pollution rules?
Yes	18. Has a regular modification/revision permit application been submitted to OAQ?
No	19. Has the proposed modification/revision commenced prior to the submission of the interim permit petition?
Yes	20. The interim petition comment period has been decided to be: <u>14 calendar days</u>

Additional Comments:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PETITION FOR INTERIM SIGNIFICANT PERMIT REVISION, SIGNIFICANT SOURCE
MODIFICATION, MINOR PERMIT REVISION, OR MINOR SOURCE MODIFICATION

Source Name: US Mineral Products Company (d/b/a Isolatek International)
Source Address: 701 N. Broadway Street, Huntington, IN 46750
Mailing Address: 701 N. Broadway Street, Huntington, IN 46750
SIC/NAICS Code: 3296/327993

Description of the Operation or Equipment:

Two natural gas fired mineral wool melters identified as EU-1A and EU-2A. EU-1A will replace the existing short stack cupola identified as EU#1, and EU-2A will replace the existing short stack cupola identified as EU#2. EU-1A & EU-2A will have a maximum capacity of 5.5 tons of raw material input per hour, each. EU-1A & EU-2A will utilize the existing baghouse identified as CE#1, exhausting to the existing stack identified as Stack #1.

Potential to Emit:

Refer to Tables 1.1, 1.2, and 1.3 for details on the methodology and calculations of the uncontrolled and controlled potential to emit (PTE) of the source and modification.

PSD Requirements:

Huntington County has been classified as attainment or unclassifiable for all criteria pollutants. Isolatek International is a mineral wool manufacturing facility, which is not one of the twenty-eight listed source categories, as specified in 326 IAC 2-2-1(ff)(1). PM, PM10, PM2.5, SO2, NOx, and H2S emissions will be limited to less than the significant emissions levels for each pollutant so the modification will be considered minor for PSD. As part of the significant source modification, netting analysis was conducted to determine the contemporaneous increases and decreases in emissions from the modification, and all emission limits serve to limit the net emission increase from the installation of the new emission units (EU-1A & EU-2A) and the removal of the old emission units (EU-1 & EU-2). In order to limit the net increase of PM, PM10, PM2.5, SO2, NOx, and H2S to less than the significant emission level for each pollutant, which is 25 tons, 15 tons,

10 tons, 40 tons, 40 tons, and 10 tons, respectively, the raw material input will be limited to less than 77,500 tons per rolling twelve month period. Compliance with the raw material input limit will be demonstrated through recordkeeping of the raw material input. Additionally, the short term emissions of PM, PM10, and PM2.5 from the new emission units will be limited to 1.10 lb/hr combined, 3.34 lb/hr combined, 2.23 lb/hr combined, respectively, and the SO₂, NO_x, and H₂S emissions from the new emission units will be limited to 7.33 lb/ton of material feed, 2.28 lb/ton of material feed, and 2.62 lb/ton of material feed, respectively. In order to demonstrate compliance with the short term limits the source will be required to conduct stack testing for PM, PM10, PM2.5, SO₂, NO_x, and H₂S. In order to comply with the PSD emission limits for PM, PM10, and PM2.5, baghouse CE#1 will control PM, PM10, and PM2.5 emissions at all times when the source is in operation. In order to demonstrate that the baghouse is in operation, the source will be required to perform parametric monitoring and visible emission notations on a daily basis.

NSPS Requirements:

There is no applicable NSPS rule applicable to this operation or equipment.

NESHAP Requirements:

The source is subject to the requirements of 40 CFR 63, Subpart DDD.

State Rules & Requirements:

- 326 IAC 1-6-3: Preventive Maintenance Plan
- 326 IAC 1-7: Stack Height
- 326 IAC 2-2: PSD
- 326 IAC 2-7: Title V Operating Permit
- 326 IAC 5-1: Opacity
- 326 IAC 6-3-2: Particulate Emission Limitations for Manufacturing Processes

Federal Enforceability:

The company consents to the federal enforceability of this interim petition.

Signature:  _____

Printed Name: Tom Lund

Title or Position: Operations Manager

Phone No.: (260) 356-2040

Date: 11-15-2011

Affidavit of Construction

I, Tom Lund, being duly sworn upon my oath, depose and say:

(Name of the Authorized Representative)

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

2. I hold the position of Operations Manager for Isolatek International
(Title) (Company Name)

3. By virtue of my position with Isolatek International, I have personal
(Company Name)

knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of Isolatek International
(Company Name)

4. I, the undersigned, have submitted an interim significant permit revision petition to the Office of Air Quality for the construction of two natural gas-fired mineral wool melters

5. Isolatek International recognizes the following risks:
(Company Name)

- (a) own financial risk, (b) that IDEM may require additional or different control technology for the final approval, (c) that IDEM may deny issuance of the final approval, and
- (d) any additional air permitting requirements.

Further Affiant said not.

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

Signature: [Signature]

Printed Name: Tom Lund

Phone No.: (260) 356-2040

Date: 11-15-2011

STATE OF INDIANA)
)SS
COUNTY OF Huntington)

Subscribed and sworn to me, a notary public in and for Wells County and

State of Indiana on this 15th day of November, 20 11.
My Commission expires: May 31, 2018

Signature: [Signature]

Printed Name: Emily m. Doss



EMILY M. DOSS
Wells County, State of Indiana
My Commission Expires May 31, 2018



EMILY M. DOSS
Wells County, State of Indiana
My Commission Expires May 31, 2018

**NOTICE OF 14-DAY PERIOD
FOR PUBLIC COMMENT**

Proposed Approval of Interim Significant Permit Revision
for **U.S. Mineral Products Company (d/b/a Isolatek International)**
in **Huntington County**

Notice is hereby given that the above company located at 701 North Broadway Street, Huntington, Indiana, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for an interim permit to construct two natural gas-fired mineral wool melters with an existing baghouse as air pollution control. Based on 8,760 hours per year of operation, the PM, PM10, PM2.5, SO2, NOx, and H2S emissions are 4.82, 14.62, 9.75, 352.92, 109.85, and 126.23 tons per year, respectively. *The net increase in PM, PM10, PM2.5, SO2, NOx, and H2S emissions will be limited to less than 25, 15, 10, 40, 40, and 10 tons per year, respectively.*

The company has submitted an application for a significant permit revision. The OAQ shall review the application in accordance with the Permit Review Rules. Operation of the source cannot commence until a valid operating permit is issued. The construction of the proposed project is entirely at the applicant's own risk.

Notice is hereby given that there will be a period of 14 days from the date of publication of this notice during which any interested person may comment on why this interim permit should or should not be issued. Appropriate comments should be related to air quality issues, interpretation of the applicable state and federal rules, calculations made, technical issues, or the effect that the operation of this facility would have on any aggrieved individuals. A copy of the application and staff review is available for examination at the **Huntington City-Township Public Library, 255 West Park Street, Huntington, Indiana, 46750**. All comments, along with supporting documentation, should be submitted in writing to the IDEM, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the Office of Air Quality (OAQ), at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have 15 days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Questions should be directed to OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 or (317) 233-0178.

Company Official's Signature:



Company Official's Printed Name:

Tom Lund

Company Name:

Isolatek International

TABLE 1.1
EMISSIONS SUMMARY
ISOLATEK INTERNATIONAL
HUNTINGTON, INDIANA

1- Summary of Emissions Increase

Hybrid Test (tpy)	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	H ₂ S	CO ₂ e
PTE (tpy) New Units									
PTE of New Units (tpy)	--	--	--	--	--	1.04	15.89	--	36,894.80
Controlled PTE of New Units (tpy)	4.82	14.62	9.75	--	--	--	--	--	--
Limited PTE of New Units (tpy)	--	--	--	283.84	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	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)	4.82	14.62	9.75	283.84	88.35	1.04	15.89	101.53	36,894.80
Sum of ATPA Increases (tpy)	<0	<0	<0	<0	<0	<0	<0	<0	<0
Hybrid Test	4.82	14.62	9.75	283.84	88.35	1.04	15.89	101.53	36,894.80
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 ₂ S	
PTE (tpy) New Units									
Limited PTE of New Units (tpy)	--	--	--	283.84	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)	--	--	--	283.84	88.35	--	--	101.53	--
Sum of Cont. Decreases (tpy)	--	--	--	-244.39	-48.88	--	--	-91.65	--
Net Emissions Increase (tpy)	--	--	--	39.45	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 069-29473-00021, issued August 26, 2010) did not have any increases or decreases for SO₂, NO_x, or CO.

TABLE 1-2

EMISSIONS INCREASE OF PROJECT
ISOLATER INTERNATIONAL
HUNTINGTON, INDIANA
(page 1 of 2)

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	VOC	²⁾ CO	³⁾ COS	H2S
Emission Factor (lb/ton feed)	22.00	20.20	20.20	7.33	2.28			2.26	2.62
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	80.58	25.08	0.00	0.00	24.86	28.82
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	80.58	25.08	0.24	3.63	24.86	28.82
Melters EU-1A & EU-2A (tpy)	1060.32	974.67	974.67	352.92	109.85	1.04	15.89	108.89	126.23
	Controlled Potential to Emit (PTE)								
Melters EU-1A & EU-2A (lb/hr)	1.10	3.34	2.23	--	--	--	--	--	--
Melters EU-1A & EU-2A (tpy)	4.82	14.62	9.75	--	--	--	--	--	--
	Limited Potential to Emit (PTE)								
Melters EU-1A & EU-2A (tpy)	--	--	--	283.84	88.35	--	--	87.58	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 in Slovenia.

SO2 emission factor is derived by subtracting from the AP-42 Ch. 11.18 Table 11.18-4 SO2 emission factor (lb/ton feed) the SO2 emissions associated with the use of coke as a fuel, adding the SO2 emissions due to combustion of natural gas.

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)

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

b. PTE (tpy)

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

c. Limited PTE (tpy)

$$\begin{aligned} \text{PM, PM10, PM2.5} &= [\text{Emission Factor (lb/ton feed)} \times 78,000 \text{ (ton feed/yr)} \times 1/2000 \text{ (lb/ton)}] \times (1-99.9\%) \\ &\quad + [\text{Emission Factor (lb/MMscf)} \times 0.0216 \text{ (MMscf/hr/melter)} \times 2 \text{ melters} \times 8,760 \text{ (hr/yr)} \times 1/2000 \text{ (lb/ton)}] \times (1-99.9\%) \\ \text{SO2, NOx, COS, H2S} &= [\text{Emission Factor (lb/ton feed)} \times 78,000 \text{ (ton feed/yr)} \times 1/2000 \text{ (lb/ton)}] \\ \text{VOC, CO} &= \text{Emission Factor (lb/MMscf)} \times 0.0216 \text{ (MMscf/hr/melter)} \times 2 \text{ melters} \times 8,760 \text{ (hr/yr)} \times 1/2000 \text{ (lb/ton)} \end{aligned}$$

TABLE 1.2

(page 2 of 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)								
Actual (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
Actual (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
Baseline Actual Emissions (tpy)	0.35	0.32	0.32	125.71	25.14	0.00	3,928.38	47.14
Cupola #2 (EU #2)								
Actual (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
Actual (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
Baseline Actual Emissions (tpy)	0.33	0.30	0.30	118.68	23.74	0.00	3,708.88	44.51

TABLE 1.3

EMISSION INCREASE OF PROJECT (GREENHOUSE GAS)
 ISOLATEK INTERNATIONAL
 HUNTINGTON, INDIANA
 (page 1 of 2)

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)	CO2e (ton/yr)	Emission Factor (EF) (kg CH4/MMBtu)	CH4 (tpy)	GWP	Emission Factor (EF) (kg N2O/MMBtu)	N2O (ton/yr)	GWP	
Melter #1 (EU-1A)	53.02	18,431.07	7.30	0.001	0.35	21	0.0001	0.03	310	18,469.35
Melter #2 (EU-2A)	53.02	18,427.57	7.30	0.001	0.35	21	0.0001	0.03	310	18,465.65

PTE for Melter #1 & Melter #2 = 36,934.80

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 GHG Emissions (tpy) = CO2 (tpy) + Methane as CO2e (tpy) + Nitrous Oxide as CO2e (tpy)

TABLE 1.3

(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 ID	CO2 Emissions			Methane: CO2 Equivalent Emissions			Nitrous Oxide: CO2 Equivalent Emissions				Total GHG Emissions	
	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	15,389.38	
Cupola #2 (EU #2)	102.40	14,982.05	0.01	1.46	21	30.72	0.0016	0.23	310	72.57	15,085.94	
	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	15,538.87	
											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 GHG Emissions (tpy) = CO2 (tpy) + Methane as CO2e (tpy) + Nitrous Oxide as CO2e (tpy)

**NOTICE OF 14-DAY PERIOD
FOR PUBLIC COMMENT**

Proposed Approval of Interim Significant
Permit Revision
for U.S. Mineral Products Company
(d/b/a Isolatek International)
in Huntington County

Notice is hereby given that the above company located at 701 North Broadway Street, Huntington, Indiana, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for an interim permit to construct two natural gas-fired mineral wool melters with an existing baghouse as air pollution control. Based on 8,760 hours per year of operation, the PM, PM10, PM2.5, SO2, NOx, and H2S emissions are 4.82, 14.62, 9.75, 352.92, 109.85, and 126.23 tons per year, respectively. The net increase in PM, PM10, PM2.5, SO2, NOx, and H2S emissions will be limited to less than 25, 15, 10, 40, 40, and 10 tons per year, respectively.

The company has submitted an application for a significant permit revision. The OAQ shall review the application in accordance with the Permit Review Rules. Operation of the source cannot commence until a valid operating permit is issued. The construction of the proposed project is entirely at the applicant's own risk.

Notice is hereby given that there will be a period of 14 days from the date of publication of this notice during which any interested person may comment on why this interim permit should or should not be issued. Appropriate comments should be related to air quality issues, interpretation of the applicable state and federal rules, calculations made, technical issues, or the effect that the operation of this facility would have on any aggrieved individuals. A copy of the application and staff review is available for examination at the Huntington City-Township Public Library, 255 West Park Street, Huntington, Indiana, 46750. All comments, along with supporting documentation, should be submitted in writing to the IDEM, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the Office of Air Quality (OAQ), at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have 15 days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Questions should be directed to OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 or (317) 233-0178.

Company Official: Tom Lund
Company Name: Isolatek International
November 17, 2011



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 7, 2011

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

SUBJECT: Final Decision
Interim
069-308911-00021

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:

Mr. Jeremy Palin (Cornerstone Environmental, Health & Safety, Inc.)
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 12/7/2011 US Mineral Products d/b/a Isolatek International 069-308911-00021 (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 Commissioners 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 Cornerstone Environmental, Health & Safety, Inc. 880 Lennox Court Zionsville IN 46077 (Consultant)										
11		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
12												
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.
---	--	--	--