

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Polar Minerals
1703 Bluff Road
Mount Vernon, Indiana 47620**

is hereby authorized to construct

- (a) one (1) crusher/screen/dryer system, identified as Hauck 20771, with a maximum rated capacity of 60 tons per hour. This system is attached to a baghouse, identified as AL, and exhausts through stack AL. The dryer is fired by natural gas and has a maximum heat input rate of 42.2 million Btu per hour;
- (b) one (1) Bepex Mill Micronizer, identified as no. 3, with a maximum rated capacity of one (1) ton per hour. This micronizer is attached to a baghouse, identified as AN, and exhausts through stack AN;
- (c) five (5) material storage silos, identified as A, B, C, D, and no. 14. These silos are attached to baghouses AG, AH, AI, AJ, and AK, respectively, for loading purposes and exhaust through stacks AG, AH, AI, AJ, and AK, respectively. These silos are also attached to a common baghouse, identified as AM, for unloading purposes.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

| | |
|---|----------------|
| Construction Permit No.: CP-129-8814-00023 | |
| Issued by: Paul Dubenetzky, Branch Chief Office of Air Management | Issuance Date: |

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit 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.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).
 - (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.

NSPS Reporting Requirement

7. That pursuant to the New Source Performance Standards (NSPS), CFR Part 60.670 through 60.676, Subpart OOO, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
- (a) Commencement of construction date (no later than 30 days after such date);
 - (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - (c) Actual start-up date (within 15 days after such date); and
 - (d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM-OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

8. That when the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

General Operation Conditions

- 1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
- 2. That the permittee shall 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.

Preventive Maintenance Plan

- 3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
 - (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick

replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
- (a) In the event that ownership of this nonmetallic mineral processing plant is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
- (a) Violation of any conditions of this permit.
 - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
 - (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
 - (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
 - (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, (local agency if applicable) or other public official having jurisdiction.

Malfunction Condition

7. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):
- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
 - (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report

Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Opacity Limitations

- 8. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:
 - (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
 - (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

NSPS

- 9. That the nonmetallic mineral processing plant shall comply with the New Source Performance Standard 326 IAC 12 and 40 CFR 60.670 through 60.676, Subpart OOO. This rule requires the following:
 - (a) particulate matter (PM) stack emissions from the crusher/screen/dryer system, no. 3 BEPEX Mill Micronizer, loading to and unloading from silos A, B, C, D, and no. 14 shall not exceed 0.05 grams per dry standard cubic meter; and
 - (b) visible emissions from the crusher/screen/dryer system, no. 3 BEPEX Mill Micronizer, loading to and unloading from silos A, B, C, D, and no. 14 shall not exceed 7 percent opacity.

Compliance with the opacity limit shall also satisfy the requirements of 326 IAC 5-1.

NSPS Testing Requirement

- 10. That pursuant to the NSPS, Subpart OOO compliance particulate matter concentration tests and opacity tests shall be performed on the crusher/screen/dryer system, no. 3 BEPEX Mill Micronizer, when loading to and unloading from silos A, B, C, D, and no. 14 within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. These tests shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedures) using the methods specified in the rule or as approved by the Commissioner.
 - (a) A test protocol shall be submitted to the OAM, Compliance Data Section, 35 days in advance of the test.
 - (b) The Compliance Data Section shall be notified of the actual test date at least two (2) weeks prior to the date.

- (c) All test reports must be received by the Compliance Data Section within 45 days of completion of the testing.
- (d) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAM that they are acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.
- (e) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

Dust Collector Operating Condition

11. That dust collector AL shall be operated at all times when the crusher/screen/dryer system is in operation; that dust collector AN shall be operated at all times that the no. 3 BEPEX Mill Micronizer is in operation; that dust collectors AG, AH, AI, AJ, and AK shall be operated at all times that material is being loaded into storage silos A, B, C, D, and no. 14, respectively; that dust collector AM shall be operated at all times that material is being unloaded from any of storage silos A, B, C, D, and no. 14.
- (a) The Permittee shall take readings of the total static pressure drop across these eight (8) dust collectors, at least once per week. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across any of the dust collectors shall be maintained within the range of 3 and 5 inches of water. The Preventive Maintenance Plan for the dust collectors shall contain troubleshooting contingency and corrective actions for the dust collectors when the pressure reading is outside of this range for any one reading.
 - (b) The instrument used for determining the pressure shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
 - (c) The gauge employed to take the pressure drop across the dust collectors or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within $\pm 2\%$ of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
 - (d) An inspection shall be performed each calendar quarter of all dust collectors. Defective dust collectors shall be replaced. A record shall be kept of the results of the inspection and the number of dust collector replaced.
 - (e) In the event that a dust collector's failure has been observed:
 - (i) The affected compartments will be shut down immediately until the failed units have been replaced.
 - (ii) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

Visible Emission Notations

12. That visible emission notations of all exhaust to the atmosphere from baghouses AL, AN, AG, AH, AI, AJ, AK, and AM shall be performed once per working shift. A trained employee will record whether emissions are normal or abnormal.
- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80% of the time, the process is in operation, not counting start up or shut down time.
 - (b) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.
 - (c) 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 and abnormal visible emissions for that specific process.
 - (d) The Preventive Maintenance Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Record Keeping Requirements

13. That a log of information necessary to document compliance with operation permit condition no. 9 shall be maintained. These records shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM).

Open Burning

14. That 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.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ? _____, 100 LBS/HR VOC ? _____, 100 LBS/HR SULFUR DIOXIDE ? _____ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ? _____ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____

LOCATION: (CITY AND COUNTY) _____

PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY:

TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

PAGE 1 OF 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO₂, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 “Malfunction” definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Polar Minerals
Source Location: 1703 Bluff Road, Mount Vernon, Indiana 47620
County: Posey County
Construction Permit No.: CP-129-8814-00023
SIC Code: 3295
Permit Reviewer: Marco A. Salenda

The Office of Air Management (OAM) has reviewed an application from Polar Minerals relating to the construction and operation of the following equipment used for processing talc, barite, and calcium carbonate:

- (a) one (1) crusher/screen/dryer system, identified as Hauck 20771, with a maximum rated capacity of 60 tons per hour. This system is attached to a baghouse, identified as AL, and exhausts through stack AL. The dryer is fired by natural gas and has a maximum heat input rate of 42.2 million Btu per hour;
- (b) one (1) Bepex Mill Micronizer, identified as no. 3, with a maximum rated capacity of one (1) ton per hour. This micronizer is attached to a baghouse, identified as AN, and exhausts through stack AN;
- (c) five (5) material storage silos, identified as A, B, C, D, and no. 14. These silos are attached to baghouses AG, AH, AI, AJ, and AK, respectively, for loading purposes and exhaust through stacks AG, AH, AI, AJ, and AK, respectively. These silos are also attached to a common baghouse, identified as AM, for unloading purposes.

Air Pollution Control Justification as Integral Part of the Process

The company has submitted the following justification such that the eight (8) baghouses, identified as AG, AH, AI, AJ, AK, AL, AM, and AN, be considered as an integral part of the process:

The baghouses are used to collect product material.

The OAM has evaluated the justifications and agreed that the eight (8) baghouses will be considered as an integral part of the process. Therefore, the permitting level will be determined using the potential emissions after the air pollution control equipment. Operating conditions will be specified in the proposed permit that these eight (8) baghouses shall operate at all times when their respective facility is in operation.

Stack Summary

| Stack ID | Operation | Height above ground (feet) | Diameter (inches) | Flow Rate (acfm) | Temperature (°F) |
|----------|--------------------------------|----------------------------|-------------------|------------------|------------------|
| AL | crusher/screen/dryer system | 15 | 30 | 26,000 | 200 |
| AN | Bepex Mill Micronizer (ID # 3) | 15 | 12 | 3,000 | 180 |
| AG | silos A | 72 | 6 | 680 | 150 |
| AH | silos B | 72 | 6 | 1,550 | 150 |
| AI | silos C | 72 | 6 | 680 | 150 |
| AJ | silos D | 72 | 6 | 680 | 150 |
| AK | silos no. 14 | 72 | 6 | 680 | 150 |
| AM | silos A, B, C, D, and no. 14 | 10 | 6 | 680 | 150 |

Recommendation

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

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

A complete application for the purposes of this review was received on July 23, 1997.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (three pages).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

| Pollutant | Allowable Emissions (tons/year) | Potential Emissions (tons/year) |
|--------------------------------------|---------------------------------|---------------------------------|
| Particulate Matter (PM) | 22 | 13 |
| Particulate Matter (PM10) | 13 | 13 |
| Sulfur Dioxide (SO ₂) | 0.1 | 0.1 |
| Volatile Organic Compounds (VOC) | 0.5 | 0.5 |
| Carbon Monoxide (CO) | 6.5 | 6.5 |
| Nitrogen Oxides (NO _x) | 26 | 26 |
| Single Hazardous Air Pollutant (HAP) | 0.0 | 0.0 |

| | | |
|---------------------|-----|-----|
| Combination of HAPs | 0.0 | 0.0 |
|---------------------|-----|-----|

- (a) Allowable PM emissions are determined from the applicability of the New Source Performance Standard 326 IAC 12 and 40 CFR 60.670 through 60.676, Subpart OOO. See attached spreadsheets (Appendix A2) for detailed calculations.
- (b) The potential PM emissions after control are less than the allowable emissions, therefore, the potential PM emissions after control are used for the permitting determination.
- (c) Except for PM, the allowable emissions are synonymous to the potential emissions, therefore the allowable emissions are used for the permitting determination.
- (d) Allowable emissions (as defined in the Indiana Rule) of NO_x are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Posey 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 and 40 CFR 52.21.
- (b) Posey County has also been classified as attainment or unclassifiable for total suspended particulates (TSP), particulate matter less than 10 microns (PM10), sulfur dioxide (SO₂), and carbon monoxide (CO). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

| Pollutant | Emissions (ton/yr) |
|-----------------|--------------------|
| PM | 31 |
| PM10 | 31 |
| SO ₂ | 0.0 |
| VOC | 0.1 |
| CO | 0.4 |
| NO _x | 1.8 |

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

- (b) These emissions were based on all previous exemptions, registrations, and construction permits issued to the source.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

| Pollutant | PM (ton/yr) | PM10 (ton/yr) | SO ₂ (ton/yr) | VOC (ton/yr) | CO (ton/yr) | NO _x (ton/yr) |
|-----------------------|----------------|------------------|-----------------------------|-----------------|----------------|-----------------------------|
| Proposed Modification | 13 | 13 | 0.1 | 0.5 | 6.5 | 26 |
| PSD Threshold Level | 250 | 250 | 250 | 250 | 250 | 250 |

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

Federal Rule Applicability

40 CFR Part 60, Subpart OOO

This nonmetallic mineral processing plant is subject to the New Source Performance Standard 326 IAC 12 and 40 CFR Part 60.670 through 60.676, Subpart OOO, since this plant does not meet the exemption qualifications under Part 60.670(c) based on the type of material being processed. This rule requires the following:

- (a) particulate matter (PM) stack emissions from the crusher/screen/dryer system, no. 3 BEPEX Mill Micronizer, silos A, B, C, D, and no. 14 shall not exceed 0.05 grams per dry standard cubic meter; and
- (b) visible emissions from the crusher/screen/dryer system, no. 3 BEPEX Mill Micronizer, silos A, B, C, D, and no. 14 shall not exceed 7 percent opacity.

(enclosed is a copy of this federal rule)

State Rule Applicability

326 IAC 5-1 (Visible Emission Limitations)

That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following, unless otherwise specified in this permit:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

326 IAC 2-7 (Part 70 Rules) and 326 IAC 2-8 (FESOP Rules)

These rules do not apply since the potential to emit (PTE) nonfugitive PM-10 does not exceed the 100 tons per year Part 70 threshold.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

None of these listed air toxics will be emitted from this proposed construction.

Conclusion

The construction of the above mentioned equipment will be subject to the conditions of the attached proposed **Construction Permit No. CP-129-8814-00023**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Polar Minerals
Source Location: 1703 Bluff Road, Mount Vernon, Indiana 47620
County: Posey County
Construction Permit No.: CP-129-8814-00023
SIC Code: 3295
Permit Reviewer: Marco A. Salenda

On September 3, 1997, the Office of Air Management (OAM) had a notice published in the Mount Vernon Democrat, Mount Vernon, Indiana, stating that Polar Minerals had applied for a construction permit to construct and operate various equipment used for processing talc, barite, and calcium carbonate with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 9, 1997, Steve Friend, OAM-Compliance Data Section staff, submitted comments on the proposed construction permit. The summary of the his comments and corresponding responses is as follows:

Comment 1

In reference to operation condition 9 of the proposed permit, it should be clarified that both the particulate matter (PM) limit of 0.05 grains per dry standard cubic meter and opacity limit of seven percent (7%) applies to the loading and unloading of material to and from the storage silos.

Response 1

Operation condition 9 has been revised to incorporate the suggested clarification.

Comment 2

In reference to operation condition 10 of the proposed permit, it should be clarified that testing of the silos should be performed when loading material into the silos and unloading material from the silos.

Response 2

Operation condition 10 has been revised to incorporate the suggested clarification.

On September 18, 1997, David Holder, OAM-Air Compliance Section staff, submitted comments on the proposed construction permit. The summary of the his comments and corresponding responses is as follows:

Comment 1

Construction of the subject facilities has been completed at the source prior to the issuance of the construction permit.

Response 1

The construction of the crusher/screen/dryer system, identified as Hauck 20771, and the Bepex Mill

Micronizer, identified as no. 3, prior to the receipt of the construction permit is considered a violation of 326 IAC 2-1. This matter is referred to the Office of Enforcement for its review and appropriate action will be taken.

The erection of storage silos A, B, C, D, and no. 14 is not considered a violation of 326 IAC 2-1 since the definition of "construction" per 326 IAC 1-2-21 excludes the erection of storage structures.

Comment 2

The applicability of the Standards of Performance for Nonmetallic Mineral Processing Plants (NSPS, Subpart OOO) was rescinded from previous permits issued to the source. Is the same expected for this proposed permit?

Response 2

The applicability of the NSPS, Subpart OOO, for the subject affected facilities in this proposed permit (i.e., crusher/screen/dryer system, no. 3 BEPEX Mill Micronizer, silos A, B, C, D, and no. 14) is based on the following:

- (a) This fixed plant processes calcium carbonate (limestone) at a maximum capacity greater than 25 tons per hour exemption level for fixed crushed stone plants. "Capacity" is defined under 40 CFR Part 60.671 as the cumulative rated capacity of all initial crushers that are part of the plant. The initial crusher being installed in this plant has a rated capacity of 60 tons per hour.
- (b) The exemption provisions of the NSPS, Subpart OOO, does not identify certain sizes of plants processing talc and barite.

Therefore, the subject facilities listed in this proposed permit are subject to the NSPS, Subpart OOO, regardless of previous permit decisions.

Appendix A3: Emissions Summary

Company Name: Polar Minerals, Inc.
 Plant Location: 1703 Bluff Road, Mt. Vernon, Indiana 47620
 County: Posey
 CP No.: 129-8814
 Plt ID No.: 129-00023
 Date Received: June 23, 1997
 Permit Reviewer: Marco A. Salenda

| Pollutant | Potential Emissions | | Allowable Emissions (tons/yr) |
|-----------|--------------------------|-------------------------|----------------------------------|
| | Before Ctrl (tons/yr) | After Ctrl (tons/yr) | |
| PM | 12.7 | 12.7 | 22.0 |
| PM-10 | 12.7 | 12.7 | 12.7 |
| SO2 | 0.1 | 0.1 | 0.1 |
| NOx | 25.9 | 25.9 | 25.9 |
| VOC | 0.5 | 0.5 | 0.5 |
| CO | 6.5 | 6.5 | 6.5 |