



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant  
DATE: May 3, 2006  
RE: Mulzer Crushed Stone, Inc. / 025-18843-00002  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval – Effective Immediately**

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

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

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

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

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

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

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

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

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



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## PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
19925 S. Alton Fredenia Road  
Leavenworth, Indiana 47137**

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

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

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

Operation Permit No.: T 025-18843-00002	
Issued by: Origin signed by Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: May 3, 2006 Expiration Date: May 3, 2011

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1, A.3, and A.4, 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)]

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The Permittee owns and operates a stationary limestone crushing and processing source.

Responsible Official:	President
Source Address:	19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137
Mailing Address:	P.O. Box 249, Tell City, Indiana 47586
General Source Phone Number:	812-739-2929
SIC Code:	1422
County Location:	Crawford
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

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This limestone crushing and processing company consists of five (5) plants:

- (a) Stationary Plant 1 is located at 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137;
- (b) Stationary Plant 1A is located at 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137;
- (c) Stationary Plant 2 is located at 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137;
- (d) Eleven's Plant (formerly Portable Plant 2) is located at 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137; and
- (e) Stationary Sand Plant is located at 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137.

Since the five (5) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they were considered one (1) source, in the Part 70 Operating Permit T 025-7484-00002, issued on December 17, 1999.

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

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

#### Stationary Plant 1

- (a) One (1) primary crusher, known as 1-C-1, installed in 1986, capacity: 1,200 tons of limestone per hour.
- (b) One (1) secondary crusher, known as 1-C-2, installed in 1986, capacity: 750 tons of limestone per hour.

- (c) Two (2) tertiary crushers (A & B), known as 1-C-3, installed in 1962 and 1987 (1-C-3A was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each.
- (d) Two (2) quaternary crushers (A & B), known as 1-C-4, installed in 1962 and 1988 (1-C-4A was replaced with identical equipment in 1988), capacity: 120 tons of limestone per hour, each.
- (e) Three (3) conveyors, known as 1-TP-1, installed in 1986, capacity: 1,500 tons of limestone per hour, each.
- (f) Nine (9) conveyors, known as 1-TP-2, installed in 1986, capacity: 1,200 tons of limestone per hour, each.
- (g) Fifteen (15) conveyors, known as 1-TP-3, installed in 1986, capacity: 1,000 tons of limestone per hour each.
- (h) One (1) truck loading and unloading operation, known as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour.
- (i) One (1) bin, installed in 1996, capacity: 150 tons of limestone.
- (j) One (1) primary screen, known as 1-S-1, installed in 1986, capacity: 1,200 tons of limestone per hour.
- (k) One (1) secondary screen, known as 1-S-2, installed in 1988, capacity: 1,250 tons of limestone per hour.
- (l) Six (6) tertiary screens (A-F), known as 1-S-3A through 1-S-3F, installed in 1986, capacity: 820 tons of limestone per hour, each.
- (m) One (1) final screen, known as 1-S-4, installed in 1986, capacity: 770 tons of limestone per hour.
- (n) One (1) rock wash operation, known as 1-RW-1, consisting of dewatering screws, a multi-deck screen and four (4) conveyors, installed in 1988, capacity: 1,250 tons of limestone per hour.

#### **Stationary Plant 1A**

- (o) One (1) primary crusher, known as 1A-C-1, installed in 1962, capacity: 800 tons of limestone per hour.
- (p) One (1) secondary crusher, known as 1A-C-2, installed in 1966 (replaced with identical equipment in 1992), capacity: 500 tons of limestone per hour.
- (q) One (1) tertiary crusher, known as 1A-C-3, installed in 1992, capacity: 400 tons of limestone per hour.
- (r) One (1) primary screen, known as 1A-S-1, installed in 1992, capacity: 800 tons of limestone per hour.
- (s) Two (2) final screens (A & B), known as 1A-S-2, installed in 1992, capacity: 500 tons of limestone per hour total.

- (t) Five (5) conveyors, known as 1A-TP-1, installed in 1992, capacity: 1,000 tons of limestone per hour, each.
- (u) Five conveyors, known as 1A-TP-2, installed in 1992, capacity: 800 tons of limestone per hour, each.
- (v) Seven (7) conveyors, known as 1A-TP-3, installed in 1992, capacity: 500 tons of limestone per hour, each.
- (w) One (1) truck loading and unloading operation, known as 1A-TU-1, installed in 1992, including one (1) bin loading operation, installed 1996, capacity: 1,200 tons of limestone per hour.

### **Stationary Plant 2**

- (x) One (1) primary crusher, known as 2-C-1, installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour.
- (y) One (1) secondary crusher, known as 2-C-2, installed in 1980, capacity: 900 tons of limestone per hour.
- (z) One (1) tertiary crusher, known as 2-C-3, installed in 1980, capacity: 750 tons of limestone per hour.
- (aa) Two (2) quaternary crushers (A & B), known as 2-C-4, installed in 1980 (2-C-4A was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each.
- (bb) Three (3) conveyors, known as 2-TP-1, installed in 1980, capacity: 1,500 tons of limestone per hour, each.
- (cc) Six (6) conveyors, known as 2-TP-2, installed in 1980, capacity: 1,200 tons of limestone per hour.
- (dd) Eight (8) conveyors, known as 2-TP-3, installed in 1980, capacity: 1,000 tons of limestone per hour, each.
- (ee) One (1) primary screen, known as 2-S-1, installed in 1980, capacity: 1,050 tons of limestone per hour.
- (ff) One (1) secondary screen, known as 2-S-2, installed in 1980, capacity: 1,150 tons of limestone per hour.
- (gg) One (1) tertiary screen, known as 2-S-3, installed in 1980, capacity: 1,245 tons of limestone per hour.
- (hh) Five (5) quaternary screens (A - E), known as 2-S-4, installed in 1980, capacity: 1,195 tons of limestone per hour.
- (ii) Two (2) truck loading operations, known as 2-TL-1 and 2-TL-2, installed in 1980, capacity: 1,200 tons of limestone per hour.

### **Eleven's Plant**

- (jj) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998.

- (kk) One (1) feeder, known as AK 1403, installed in 1998, capacity: 390 tons of limestone per hour.
- (ll) One (1) secondary crusher, known as AI 1402, installed in 1998, capacity: 390 tons of limestone per hour.
- (mm) One (1) screen, known as AK 1404, installed in 1998, capacity: 390 tons of limestone per hour.
- (nn) Three (3) stackers, known as LP-TP-3, installed in 1998, capacity: 300 tons of limestone per hour each.
- (oo) Four (4) conveyors, known as LP-TP-1, installed in 1998, capacity: 390 tons of limestone per hour, each.
- (pp) One (1) No. 2 fuel oil-fired intermittent electric generator, known as EU AG 1402, capacity: 7.40 million British thermal units per hour.
- (qq) Six (6) conveyors, known as LP-TP-2, installed in 1998, capacity: 300 tons of limestone per hour, each.

A.4 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 does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.5 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 025-18842-00002, 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.

(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 Enforceability [326 IAC 2-7-7]**

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.4 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.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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
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 the certification by the "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 maintain and implement Preventive Maintenance Plans (PMPs) for the source as described in 326 IAC 1-6-3. At a minimum the PMPs shall include:

- (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.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "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]**

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- (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 Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967  
Southwest Regional Office: 812-380-2305, Facsimile Number: 812-380-2304

- (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 Branch, Office of Air Quality  
100 North Senate Avenue  
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 the certification by the "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.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**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]**

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- (a) All terms and conditions of permits established prior to T 025-18843-00002 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 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**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]**

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- (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 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 the certification by the "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 2-7-4] [326 IAC 2-7-8(e)]**

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- (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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
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 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by the "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 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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
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 the certification by the "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.

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

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

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

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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]**

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- (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  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "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]**

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- (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 317-233-4320 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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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.

**B.25 Term of Conditions [326 IAC 2-1.1-9.5]**

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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.

## 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 5-1-3 (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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

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

**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 plan submitted for Stationary Plants 1, 1A, and 2, on August 18, 1998 and for Stationary Plant 2A on September 30, 1997.

The plans consist of using a water truck to water haul roads and stock piles as necessary and applying water on storage piles, unpaved roadways, material loading and unloading operations on an "as needed" basis.

**C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-

3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

### C.8 Performance Testing [326 IAC 3-6]

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 certification by the "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, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

## Compliance Requirements [326 IAC 2-1.1-11]

### C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require the certification by the "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.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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

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

**C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 11, 1996.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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

**C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;

- (2) review of operation and maintenance procedures and records;
- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "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.16 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]**

- (a) Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 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  
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The emission statement 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

## **Stratospheric Ozone Protection**

### **C.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Stationary Plant 1

- (a) One (1) primary crusher, known as 1-C-1, installed in 1986, capacity: 1,200 tons of limestone per hour.
- (b) One (1) secondary crusher, known as 1-C-2, installed in 1986, capacity: 750 tons of limestone per hour.
- (c) Two (2) tertiary crushers (A & B), known as 1-C-3, installed in 1962 and 1987 (1-C-3A was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each.
- (d) Two (2) quaternary crushers (A & B), known as 1-C-4, installed in 1962 and 1988 (1-C-4A was replaced with identical equipment in 1988), capacity: 120 tons of limestone per hour, each.
- (e) Three (3) conveyors, known as 1-TP-1, installed in 1986, capacity: 1,500 tons of limestone per hour, each.
- (f) Nine (9) conveyors, known as 1-TP-2, installed in 1986, capacity: 1,200 tons of limestone per hour, each.
- (g) Fifteen (15) conveyors, known as 1-TP-3, installed in 1986, capacity: 1,000 tons of limestone per hour each.
- (h) One (1) truck loading and unloading operation, known as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour.
- (i) One (1) bin, installed in 1996, capacity: 150 tons of limestone.
- (j) One (1) primary screen, known as 1-S-1, installed in 1986, capacity: 1,200 tons of limestone per hour.
- (k) One (1) secondary screen, known as 1-S-2, installed in 1988, capacity: 1,250 tons of limestone per hour.
- (l) Six (6) tertiary screens (A-F), known as 1-S-3A through 1-S-3F, installed in 1986, capacity: 820 tons of limestone per hour, each.
- (m) One (1) final screen, known as 1-S-4, installed in 1986, capacity: 770 tons of limestone per hour.
- (n) One (1) rock wash operation, known as 1-RW-1, consisting of dewatering screws, a multi-deck screen and four (4) conveyors, installed in 1988, capacity: 1,250 tons of limestone 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.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the aggregate nonmetallic mineral processing plant except when otherwise specified in 40 CFR 60 Subpart OOO.

#### D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(3), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units in Stationary Plant 1 may exceed the pound per hour limitation calculated by the following equation, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

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

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

#### D.1.3 Opacity [326 IAC 12] [40 CFR 60.670 through 60.676, Subpart OOO]

Pursuant to New Source Performance Standards, 326 IAC 12 (40 CFR 60.670 through 60.676, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plants" the following standards shall apply to this plant:

- (a) The crushing operations, identified as 1-C-1, 1-C-2, 1-C-3B, and 1-C-4B, shall be limited to fifteen percent (15%) opacity or less.
- (b) The screening operations identified as 1-S-1, 1-S-2, 1-S-3A through 1-S-3F and 1-S-4, as well as the conveying operations, identified as 1-TP-1, 1-TP-2, and 1-TP-3, shall be limited to ten percent (10%) or less.
- (c) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 1 shall be exempt from the requirements of 40 CFR 60.672.
- (d) Compliance shall be determined by 40 CFR 60, Appendix A, Method 9.

#### D.1.4 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 crushing (1-C-1, 1-C-2, 1-C-3A & B, and 1-C-4A & B), the screening (1-S-1, 1-S-2, 1-S-3A through 1-S-3F, and 1-S-4), and the conveying (1-TP-1, 1-TP-2, and 1-TP-3) operations.

### 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 crushing (1-C-1, 1-C-2, 1-C-3A & B, and 1-C-4A & B), the screening (1-S-1, 1-S-2, 1-S-3A through 1-S-3F, and 1-S-4), and the conveying (1-TP-1, 1-TP-2, and 1-TP-3) operations 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 at any crusher, screen, or conveyor, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

#### **D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the crushing (1-C-1, 1-C-2, 1-C-3A & B, and 1-C-4A & B), the screening (1-S-1, 1-S-2, 1-S-3A through 1-S-3F, and 1-S-4), and the conveying (1-TP-1, 1-TP-2, and 1-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.1.7 Record Keeping Requirements [326 IAC 12] [40 CFR 676(a)(1), Subpart OOO]**

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Pursuant to 40 CFR 60.676(a)(1), on December 11, 1996, the Permittee submitted to IDEM OAQ, the following information:

- (a) The rated capacity in megagrams or tons per hour of the tertiary crusher (1-C-3A) that was constructed in 1962, and
- (b) The rated capacity in tons per hour of the tertiary crusher (1-C-3A) constructed in 1987.
- (c) The rated capacity in megagrams or tons per hour of the quaternary crusher (1-C-4A) that was constructed in 1962, and
- (d) The rated capacity in tons per hour of the quaternary crusher (1-C-4A) constructed in 1988.

Compliance with paragraphs (a) through (d) of this condition renders the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675, Subpart OOO not applicable to tertiary crusher (1-C-3A) and quaternary crusher (1-C-4A).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Stationary Plant 1A

- (o) One (1) primary crusher, known as 1A-C-1, installed in 1962, capacity: 800 tons of limestone per hour.
- (p) One (1) secondary crusher, known as 1A-C-2, installed in 1966 (replaced with identical equipment in 1992), capacity: 500 tons of limestone per hour.
- (q) One (1) tertiary crusher, known as 1A-C-3, installed in 1992, capacity: 400 tons of limestone per hour.
- (r) One (1) primary screen, known as 1A-S-1, installed in 1992, capacity: 800 tons of limestone per hour.
- (s) Two (2) final screens (A & B), known as 1A-S-2, installed in 1992, capacity: 500 tons of limestone per hour total.
- (t) Five (5) conveyors, known as 1A-TP-1, installed in 1992, capacity: 1,000 tons of limestone per hour, each.
- (u) Five conveyors, known as 1A-TP-2, installed in 1992, capacity: 800 tons of limestone per hour, each.
- (v) Seven (7) conveyors, known as 1A-TP-3, installed in 1992, capacity: 500 tons of limestone per hour, each.
- (w) One (1) truck loading and unloading operation, known as 1A-TU-1, installed in 1992, including one (1) bin loading operating, installed 1996, capacity: 1,200 tons of limestone 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.2.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the aggregate nonmetallic mineral processing plant except when otherwise specified in 40 CFR 60 Subpart OOO.

#### D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(3), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units in Stationary Plant 1A may exceed the pound per hour limitation calculated by the following equation, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

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

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

**D.2.3 Opacity [326 IAC 12] [40 CFR 60.670 through 60.676, Subpart OOO]**

Pursuant to New Source Performance Standards, 326 IAC 12 (40 CFR 60.670 through 60.676, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plants" the following standards shall apply to this plant:

- (a) The crushing operations, identified as 1A-C-3, shall be limited to fifteen percent (15%) opacity or less.
- (b) The screening operations identified as 1A-S-2A and 1A-S-2B, as well as the conveying operations, identified as 1A-TP-1, 1A-TP-2, and 1A-TP-3, shall be limited to ten percent (10%) or less.
- (c) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 1A shall be exempt from the requirements of 40 CFR 60.672.
- (d) Compliance shall be determined by 40 CFR 60, Appendix A, Method 9.

**D.2.4 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 crushing (1A-C-1, 1A-C-2, 1A-C-3), the screening (1A-S-2A and 1A-S-2B), and the conveying (1A-TP-1, 1A-TP-2, and 1A-TP-3) operations.

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

**D.2.5 Visible Emissions Notations**

- (a) Visible emission notations of the crushing (1A-C-1, 1A-C-2, 1A-C-3), the screening (1A-S-2A and 1A-S-2B), and the conveying (1A-TP-1, 1A-TP-2, and 1A-TP-3) operations 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 at any crusher, screen, or conveyor, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

**D.2.6 Record Keeping Requirements**

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the crushing (1A-C-1, 1A-C-2, 1A-C-3), the screening (1A-S-2A and 1A-S-2B), and the conveying (1A-TP-1, 1A-TP-2, and 1A-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.7 Record Keeping Requirements [326 IAC 12] [40 CFR 676(a)(1), Subpart OOO]

Pursuant to 40 CFR 60.676(a)(1), on December 11, 1996, the Permittee submitted to IDEM OAQ, the following information:

- (a) The rated capacity in megagrams or tons per hour of the secondary crusher (1A-C-2) that was constructed in 1966, and
- (b) The rated capacity in tons per hour of the secondary crusher (1A-C-3) constructed in 1992.

Compliance with paragraphs (a) and (b) of this condition renders the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675, Subpart OOO not applicable to secondary crusher (1A-C-2).

### SECTION D.3

### FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15)]: Stationary Plant 2

- (x) One (1) primary crusher, known as 2-C-1, installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour.
- (y) One (1) secondary crusher, known as 2-C-2, installed in 1980, capacity: 900 tons of limestone per hour.
- (z) One (1) tertiary crusher, known as 2-C-3, installed in 1980, capacity: 750 tons of limestone per hour.
- (aa) Two (2) quaternary crushers (A & B), known as 2-C-4, installed in 1980 (2-C-4A was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each.
- (bb) Three (3) conveyors, known as 2-TP-1, installed in 1980, capacity: 1,500 tons of limestone per hour, each.
- (cc) Six (6) conveyors, known as 2-TP-2, installed in 1980, capacity: 1,200 tons of limestone per hour.
- (dd) Eight (8) conveyors, known as 2-TP-3, installed in 1980, capacity: 1,000 tons of limestone per hour, each.
- (ee) One (1) primary screen, known as 2-S-1, installed in 1980, capacity: 1,050 tons of limestone per hour.
- (ff) One (1) secondary screen, known as 2-S-2, installed in 1980, capacity: 1,150 tons of limestone per hour.
- (gg) One (1) tertiary screen, known as 2-S-3, installed in 1980, capacity: 1,245 tons of limestone per hour.
- (hh) Five (5) quaternary screens (A - E), known as 2-S-4, installed in 1980, capacity: 1,195 tons of limestone per hour.
- (ii) Two (2) truck loading operations, known as 2-TL-1 and 2-TL-2, installed in 1980, capacity: 1,200 tons of limestone 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.3.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the aggregate nonmetallic mineral processing plant except when otherwise specified in 40 CFR 60 Subpart OOO.

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

Pursuant to 326 IAC 6-3-2(e)(3), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units in Stationary Plant 2 may exceed the pound per hour limitation calculated by the following equation, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

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

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

#### D.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 crushing (2-C-1, 2-C-2, 2-C-3, 2-C-4A, 2-C-4B), the screening (2-S-1, 2-S-2, 2-S-3, and 2-S-4A through 2-S-4E), and the conveying (2-TP-1, 2-TP-2, 2-TP-3) operations.

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

##### D.3.4 Visible Emissions Notations

- (a) Visible emission notations of the crushing (2-C-1, 2-C-2, 2-C-3, 2-C-4A, 2-C-4B), the screening (2-S-1, 2-S-2, 2-S-3, and 2-S-4A through 2-S-4E), and the conveying (2-TP-1, 2-TP-2, 2-TP-3) operations 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 at any crusher, screen, or conveyor, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

##### D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain records of visible emission notations of the crushing (2-C-1, 2-C-2, 2-C-3, 2-C-4A, 2-C-4B), the screening (2-S-1, 2-S-2, 2-S-3, and 2-S-4A through 2-S-4E), and the conveying (2-TP-1, 2-TP-2, 2-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

##### D.3.6 Record Keeping Requirements [326 IAC 12] [40 CFR 676(a)(1), Subpart OOO]

Pursuant to 40 CFR 60.676(a)(1), on December 11, 1996, the Permittee submitted to IDEM OAQ, the following information:

- (a) The rated capacity in megagrams or tons per hour of primary crusher (2-C-1) that was constructed in 1980, and
- (b) The rated capacity in tons per hour of primary crusher (2-C-1) constructed in 1994.

- (c) The rated capacity in megagrams or tons per hour of quaternary crusher (2-C-4A) that was constructed in 1980, and
- (d) The rated capacity in tons per hour of the quaternary crusher (2-C-4A) constructed in 1987.

Compliance with paragraphs (a) through (d) of this condition renders the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675, Subpart OOO not applicable to primary crusher (2-C-1) and quaternary crusher (2-C-4A).

## SECTION D.4

## FACILITY CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Eleven's Plant

- (jj) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998.
- (kk) One (1) feeder, known as AK 1403, installed in 1998, capacity: 390 tons of limestone per hour.
- (ll) One (1) secondary crusher, known as AI 1402, installed in 1998, capacity: 390 tons of limestone per hour.
- (mm) One (1) screen, known as AK 1404, installed in 1998, capacity: 390 tons of limestone per hour.
- (nn) Three (3) stackers, known as LP-TP-3, installed in 1998, capacity: 300 tons of limestone per hour each.
- (oo) Four (4) conveyors, known as LP-TP-1, installed in 1998, capacity: 390 tons of limestone per hour, each.
- (pp) One (1) No. 2 fuel oil-fired intermittent electric generator, known as EU AG 1402, capacity: 7.40 million British thermal units per hour.
- (qq) Six (6) conveyors, known as LP-TP-2, installed in 1998, capacity: 300 tons of limestone 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.4.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the aggregate nonmetallic mineral processing plant except when otherwise specified in 40 CFR 60 Subpart OOO.

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

Pursuant to 326 IAC 6-3-2(e)(3), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units in the Eleven's Plant except for the No. 2 fuel oil fired intermittent electric generator may exceed the pound per hour limitation calculated by the following equation, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

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

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

#### D.4.3 Opacity [326 IAC 12] [40 CFR 60.670 through 60.676, Subpart OOO]

Pursuant to New Source Performance Standards, 326 IAC 12 (40 CFR 60.670 through 60.676, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plants" the following standards shall apply to this plant:

- (a) The crushing operations, identified as AI 1402, shall be limited to fifteen percent (15%) opacity or less.
- (b) The screening operations identified as AK 1404 as well as the conveying operations, identified as LP-TP-1, LP-TP-2, and LP-TP-3 shall be limited to ten percent (10%) or less.
- (c) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 2A shall be exempt from the requirements of 40 CFR 60.672.
- (d) Compliance shall be determined by 40 CFR 60, Appendix A, Method 9.

**D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the crushing (AI 1402), the screening (AK 1404), and the conveying (LP-TP-1, LP-TP-2, and LP-TP-3) operations.

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

**D.4.5 Visible Emissions Notations**

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- (a) Visible emission notations of the crushing (AI 1402), the screening (AK 1404), and the conveying (LP-TP-1, LP-TP-2, and LP-TP-3) operations 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 at any crusher, screen, or conveyor, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

**D.4.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of visible emission notations the crushing (AI 1402), the screening (AK 1404), and the conveying (LP-TP-1, LP-TP-2, and LP-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.5

## FACILITY CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Stationary Plants 1, 1A, and 2, and the Eleven's Plant

All of the nonfugitive emission units at this source (crushing, screening, and conveying operations).

(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 Throughput Limitation [326 IAC 2-2]

The source-wide crushed stone throughput shall not exceed 10,000,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit shall ensure that the PM and PM<sub>10</sub> emissions from the entire source, excluding fugitive emissions, do not exceed two hundred fifty (250) tons per year each. Compliance with this throughput limitation renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

#### D.5.2 Record Keeping Requirements

- (a) To document compliance with Condition D.5.1, the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.5.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
Source Address: 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
Mailing Address: P.O. Box 249, Tell City, Indiana 47586  
Part 70 Permit No.: T 025-18843-00002

**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  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
Source Address: 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
Mailing Address: P.O. Box 249, Tell City, Indiana 47586  
Part 70 Permit No.: T 025-18843-00002

**This form consists of 2 pages**

**Page 1 of 2**

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.
--

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

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

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

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , 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 Quarterly Report**

Source Name: Mulzer Crush Stone, Inc. (Cape Sandy Facility)  
 Source Address: 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
 Mailing Address: P.O. Box 249, Tell City, Indiana 47586  
 Part 70 Permit No.: T 025-18843-00002  
 Facilities: Entire Source - Nonfugitive Emission Units (Crushing, Screening and Conveying Operations)  
 Parameter: Crushed stone throughput  
 Limit: 10,000,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

Month	Crushed Stone Throughput (tons)	Crushed Stone Throughput (tons)	Crushed Stone Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this month.
- Deviation/s occurred in this month.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attach a signed certification to complete 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: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
Source Address: 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
Mailing Address: P.O. Box 249, Tell City, Indiana 47586  
Part 70 Permit No.: T 025-18843-00002

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

<p>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. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do 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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

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

**Source Name:** Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
**Source Location:** 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
**County:** Crawford  
**SIC Code:** 1422  
**Operation Permit No.:** T 025-7484-00002  
**Operation Permit Issuance Date:** December 17, 1999  
**Permit Renewal No.:** T 025-18843-00002  
**Permit Reviewer:** Michael S. Schaffer

On November 23, 2005, the Office of Air Quality (OAQ) had a notice published in the Corydon News, Corydon, Indiana, stating that Mulzer Crushed Stone, Inc. (Cape Sandy Facility), had applied for a Part 70 Operating Permit to operate a stationary limestone crushing and processing source with a continuous wet suppression system for particulate control. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit Renewal for this operation and provided information on how the public could review the proposed Part 70 Operating Permit Renewal 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 Part 70 Operating Permit Renewal should be issued as proposed.

On December 21, 2005, Thomas W. Rarick of KERAMIDA Environmental, Inc. on behalf Mulzer Crushed Stone, Inc. (Cape Sandy Facility) submitted comments on the proposed Part 70 Operating Permit Renewal. A revision to Comment 1 of the December 21, 2005 submittal was received on January 31, 2006. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### **Comment 1:**

*December 21, 2005 comment:*

Conditions D.1.4, D.2.4, D.3.3, and D.4.4 should be deleted. Mulzer Crushed Stone, Inc. is not requesting PM and PM<sub>10</sub> limits, nor do we believe limits are required. The original Title V permit correctly did not include PM and PM<sub>10</sub> limits to render 326 IAC 2-2 not applicable.

The 326 IAC 6-3 Particulate Emission Limitation limits pound per hour particulate emissions to a level that requires controls to demonstrate compliance. The use of the control lowers the potential to emit of the source to below the major source thresholds for PSD. The potential to emit should reflect the plant emissions after controls since the controls are required to comply with a federally enforceable limit.

If IDEM believes the original permit was in error or that the current control measures required to comply with the particulate and opacity limits are not sufficient to establish a PTE below major PSD thresholds then a source wide limit of less than 250 tons per year would be more appropriate. However, the 13 pound per hour limit for each Plant 1, 1A, and 2 and the 10 pound per hour limit for Plant 2A are more restrictive than necessary to render 326 IAC 2-2 not applicable. For instance, Plant 1 could operate above the 13 pound per hour limit listed in the permit as long as the cumulative source emission are below 326 IAC 2-2 major source thresholds for PM and PM<sub>10</sub>.

*January 31, 2006 amended comment:*

Comment #1 is being amended to include the renaming of Plant 2A as the Eleven's Plant (this change should be made throughout the permit and TSD) and to request replacing Conditions D.1.4, D.2.4, D.3.3, and D.4.4. Comment #1 originally addressed deleting the conditions or at most including a source wide limit of less than 250 tons per year of PM/PM<sub>10</sub>. The amended language below renames Plant 2A and includes a throughput limit that would ensure emissions at the source remain below 250 tons per year. The following conditions should be modified as follows:

- D.1.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]  
The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plants 1, 1A, 2, and Eleven's, shall not exceed 10,000,000 tons per year of crushed stone. This limit shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- D.2.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]  
The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plants 1, 1A, 2, and Eleven's, shall not exceed 10,000,000 tons per year of crushed stone. This limit shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- D.3.3 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]  
The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plants 1, 1A, 2, and Eleven's shall not exceed 10,000,000 tons per year of crushed stone. This limit shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- D.4.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]  
The PM/PM<sub>10</sub> emissions from the nonfugitive stone processing emission units at Stationary Plants 1, 1A, 2, and Eleven's shall not exceed 10,000,000 tons per year of crushed stone. This limit shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

**Response 1:**

IDEM, OAQ agrees that the proposed throughput limit methodology does provide for more operational flexibility than the pound per hour limiting methodology that was presented in the draft permit.

As indicated in the above comment, Mulzer Crushed Stone, Inc. (Cape Sandy Facility) has accepted the following source-wide throughput limitation in order to render the requirements of 326 IAC 2-2, PSD not applicable:

Entire Source (nonfugitive emission units at Stationary Plants 1, 1A, 2, and the Eleven's Plant) - The source-wide crushed stone throughput shall not exceed 10,000,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

This throughput limit in combination with AP-42 emission factors will ensure that the potential to emit PM and PM<sub>10</sub> from the entire source, excluding fugitives, do not exceed two hundred fifty (250) tons per year. Please see the emissions calculations in Appendix A of this document for further details.

As a result, the Potential to Emit table on Page 8 of 17 in the Technical Support Document (TSD) for the draft permit has been revised in this document as follows:

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Stationary Plant 1 (nonfugitive only)	56.9	56.9	-	-	-	-	-
Stationary Plant 1A (nonfugitive only)	56.9	56.9	-	-	-	-	-
Stationary Plant 2 (nonfugitive only)	47.4	45.7	-	-	-	-	-
Stationary Plant 2A (nonfugitive only, including intermittent generator)	<b>195.7 (combined total)</b>	<b>76.5 (combined total)</b>	16.4	2.92	27.6	104	Negli- gible
Insignificant Activities	2.50	2.50	-	0.75	-	-	0.750
Total Emissions	<del>220.5</del> <b>198.2</b>	<del>220.5</del> <b>79.0</b>	16.4	3.67	27.6	104	0.750

Note: the potential to emit of the intermittent generator was included on Page 18 of 18 in Appendix A of the TSD

In addition to the proposed throughput limit, Mulzer Crushed Stone, Inc. (Cape Sandy Facility) shall be required to:

- (a) Keep monthly records of the source-wide crushed stone throughput; and
- (b) Submit quarterly summaries of the source-wide crushed stone throughput.

Therefore, Conditions D.1.4, D.2.4, D.3.3, and D.4.4 have been deleted and subsequent conditions have been renumbered. In addition, the equipment description box for Section D.5, Conditions D.5.1 - D.5.3 and a quarterly report form have been added. The changes to the Part 70 Operating Permit are as follows:

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

**Stationary Plant 2A-Eleven's Plant**

Note: This change has been made throughout the Part 70 Operating Permit Renewal.

~~D.1.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]~~

~~The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 1 shall not exceed 13.0 pounds per hour. This limit in combination with the limits in Conditions D.2.4, D.3.3, and D.4.4, shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

D.1.8 6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.7 **5**, the Permittee shall maintain records of visible emission notations of the crushing (1-C-1, 1-C-2, 1-C-3A & B, and 1-C-4A & B), the screening (1-S-1, 1-S-2, 1-S-3A through 1-S-3F, and 1-S-4), and the conveying (1-TP-1, 1-TP-2, and 1-TP-3) operations once per day.

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

~~D.2.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]~~

~~The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 1A shall not exceed 13.0 pounds per hour. This limit, in combination with the limits in Conditions D.1.4, D.3.3, and D.4.4, shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~D.2.8 6 Record Keeping Requirements~~

- (a) To document compliance with Condition D.2.7 5, the Permittee shall maintain records of visible emission notations of the crushing (1A-C-1, 1A-C-2, 1A-C-3), the screening (1A-S-2A and 1A-S-2B), and the conveying (1A-TP-1, 1A-TP-2, and 1A-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.3.3 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]~~

~~The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 2 shall not exceed 13.0 pounds per hour. This limit, in combination with the limits in Conditions D.1.4, D.2.4, and D.4.4, shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~D.3.7 5 Record Keeping Requirements~~

- (a) To document compliance with Condition D.3.6 4, the Permittee shall maintain records of visible emission notations of the crushing (2-C-1, 2-C-2, 2-C-3, 2-C-4A, 2-C-4B), the screening (2-S-1, 2-S-2, 2-S-3, and 2-S-4A through 2-S-4E), and the conveying (2-TP-1, 2-TP-2, 2-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.4.4 Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM<sub>10</sub>) [326 IAC 2-2]~~

~~The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 2A except for the No. 2 fuel oil fired intermittent electric generator shall not exceed 10.0 pounds per hour. This limit, in combination with the limits in Conditions D.1.4, D.2.4, and D.3.3, shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.~~

~~D.4.8 6 Record Keeping Requirements~~

- (a) To document compliance with Condition D.4.7 5, the Permittee shall maintain records of visible emission notations the crushing (AI 1402), the screening (AK 1404), and the conveying (LP-TP-1, LP-TP-2, and LP-TP-3) operations once per day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.5

## FACILITY CONDITIONS

**Facility Description [326 IAC 2-7-5(15)]: Stationary Plants 1, 1A, and 2, and the Eleven's Plant**

**All of the nonfugitive emission units at this source (crushing, screening, and conveying operations).**

**(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 Throughput Limitation [326 IAC 2-2]**

The source-wide crushed stone throughput shall not exceed 10,000,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit shall ensure that the PM and PM<sub>10</sub> emissions from the entire source, excluding fugitive emissions, do not exceed two hundred fifty (250) tons per year each. Compliance with this throughput limitation renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

### **D.5.2 Record Keeping Requirements**

- (a) To document compliance with Condition D.5.1, the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.5.3 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**Part 70 Quarterly Report**

**Source Name:** Mulzer Crush Stone, Inc. (Cape Sandy Facility)  
**Source Address:** 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
**Mailing Address:** P.O. Box 249, Tell City, Indiana 47586  
**Part 70 Permit No.:** T 025-18843-00002  
**Facilities:** Entire Source - Nonfugitive Emission Units (Crushing, Screening, and Conveying Operations)  
**Parameter:** Crushed stone throughput  
**Limit:** 10,000,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

**YEAR:** \_\_\_\_\_

Month	Crushed Stone Throughput (tons)	Crushed Stone Throughput (tons)	Crushed Stone Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this month.
- Deviation/s occurred in this month.  
Deviation has been reported on: \_\_\_\_\_

**Submitted by:** \_\_\_\_\_

**Title/Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Attach a signed certification to complete this report.**

**Comment 2:**

Conditions D.1.6, D.2.6, D.3.5, and D.4.6 should be deleted. Each of the compliance determination conditions state that wet stone process and/or a continuous wet suppression systems for crushing, screening and conveying shall be used at all times to comply with two referenced permit conditions. The first permit condition referenced incorporates 40 CFR 60, Subpart OOO limits and the second permit condition referenced limits PM and PM<sub>10</sub> emissions to render 326 IAC 2-2 not applicable. Subpart OOO is incorrectly listed since Subpart OOO does not specifically list control measures. The second permit condition referenced is incorrectly listed since it is not a necessary permit requirement as addressed in Comment #1. No rule authority is listed for this condition because the controls are not specifically required by rule. This permit condition is more restrictive than state or federal rules and therefore lacks regulatory authority.

The requirement to include wet stone process and/or a continuous wet suppression system for crushing, screening and conveying processes should be deleted. It is not necessary for each crushing, screening and conveying processes to be continuously wet suppressed to comply with Subpart OOO or a limit of less than 250 tons per year of PM and PM<sub>10</sub>.

If IDEM finds that a compliance determination for control measures is necessary, the definition of wet stone process should be included as well as the specific units that require controls.

**Response 2:**

Since this source has accepted throughput limitations on the nonfugitive emission units at this source rather than pound per hour PM/PM<sub>10</sub> limitations for each plant, the control requirements are no longer necessary to ensure that the source-wide PM and PM<sub>10</sub> emissions from nonfugitive emission units are each less than two hundred fifty (250) tons per year. The emission calculations for the entire source in Appendix A of this document show that the throughput limits coupled with the AP-42 emission factors are sufficient to render the requirements of 326 IAC 2-2 not applicable without requiring the use of control measures. The Permittee is still required to control fugitive particulate matter emissions in accordance with their Fugitive Dust Control Plan in order to comply with the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) and 326 IAC 6-4 (Fugitive Dust Emissions). Therefore, Conditions D.1.6, D.2.6, D.3.5, and D.4.5 have been deleted as follows:

~~D.1.6 — Dust Suppression for Crushing, Screening and Conveying Operations~~

~~In order to demonstrate compliance with Conditions D.1.3 and D.1.4, the Permittee shall use a wet stone process and/or a continuous wet suppression system at all times when the crushing, screening and conveying processes are in operation.~~

~~D.2.6 — Dust Suppression for Crushing, Screening and Conveying Operations~~

~~In order to demonstrate compliance with Conditions D.2.3 and D.2.4, the Permittee shall use a wet stone process and/or a continuous wet suppression system at all times when the crushing, screening and conveying processes are in operation.~~

~~D.3.5 — Dust Suppression for Crushing, Screening and Conveying Operations~~

~~In order to demonstrate compliance with Conditions D.3.3, the Permittee shall use a wet stone process and/or a continuous wet suppression system at all times when the crushing, screening and conveying processes are in operation.~~

~~D.4.6 — Dust Suppression for Crushing, Screening and Conveying Operations~~

~~In order to demonstrate compliance with Conditions D.4.3 and D.4.4, the Permittee shall use a wet stone process and/or a continuous wet suppression system at all times when the crushing, screening and conveying processes are in operation.~~

Upon further review, the OAQ has decided to make the following additional changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

**Change 1:**

For clarification purposes, Condition B.2, Permit Term has been revised as follows:

**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 025-18842-00002**, 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.
- (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.**

**Change 2:**

The term "in letter form" has been removed from Condition B.9(a) Annual Compliance Certification as follows:

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

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

**Change 3:**

To be consistent with 326 IAC 2-7-15(a) the word "in" has been removed from the second sentence of Condition B.12(a) as follows:

**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 ~~in~~ 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.

**Change 4:**

For clarification purposes, Condition B.13 has been revised as follows:

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

- (a) All terms and conditions of ~~previous~~ permits **established prior to T 025-18843-00002** 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**.
- ~~by this permit.~~
- (b) **Provided that all terms and conditions are accurately reflected in this permit, A**all previous registrations and permits are superseded by this **Part 70 Operating p**Permit.

**Change 5:**

The terms of the Permit Renewal requirements in Condition B.16 have been revised as follows:

**B.16 Permit Renewal [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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- Request for renewal shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251
- (b) ~~Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]~~
- ~~(1)~~ A timely renewal application is one that is:
- ~~(A)~~ **(1)** Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - ~~(B)~~ **(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.
- ~~(2)~~ If IDEM, OAQ, upon receiving a timely and complete 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.
- (c) ~~Right to Operate After Application for Renewal [326 IAC 2-7-3]~~  
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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

- ~~(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.~~

**Change 6:**

Upon further review, IDEM has decided to remove (d) concerning nonroad engines from B.17 Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

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

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- ~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

**Change 7:**

In accordance with 326 IAC 2-1.1-9.5, Condition B.25 (Term of Conditions) has been added to the Part 70 Operating Permit Renewal as follows:

**B.25 Term of Conditions [326 IAC 2-1.1-9.5]**

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**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.**

**Change 8:**

The source address has been revised throughout the Part 70 Operating Permit Renewal as follows:

Source Address: ~~RR1, Box 222, Alton County Road,~~ **19925 S. Alton Fredenia Road**, Leavenworth, Indiana 47137

**Appendix A: Emission Calculations  
Stone Quarry and Processing**

**Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
Address City IN Zip: 19925 S. Alton Fredenia Road, Leavenworth, Indiana 47137  
Permit Number: T 025-18843  
Plant ID: 025-00002  
Reviewer: Michael S. Schaffer  
Application Date: March 19, 2004**

**All Plants - Non Fugitive Emissions Only - PSD Definition**

**\*\* Limited PM emissions \*\***

Crushing (primary)	10,000,000	ton/yr x	0.0007 lb/ton	/ 2000 lb/ton =	3.50 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	10,000,000	ton/yr x	0.00504 lb/ton	/ 2000 lb/ton =	25.20 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	10,000,000	ton/yr x	0.0054 lb/ton	/ 2000 lb/ton =	27.00 tons/yr	AP-42 Ch.11.19.2 (8/04)
Screening	10,000,000	ton/yr x	0.025 lb/ton	/ 2000 lb/ton =	125.00 tons/yr	AP-42 Ch.11.19.2 (8/04)
Conveyor Transfer	10,000,000	ton/yr x	0.003 lb/ton	/ 2000 lb/ton =	15.00 tons/yr	AP-42 Ch.11.19.2 (8/04)
<b>Total PM emissions:</b>					<b>195.7 tons/yr</b>	

\*PM emission factors are calculated by multiplying the PM-10 emission factors by 2.1 for secondary crushing

**\*\* Limited PM-10 emissions \*\***

Crushing (primary)	10,000,000	ton/yr x	0.0007 lb/ton	/ 2000 lb/ton x	3.50 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	10,000,000	ton/yr x	0.0024 lb/ton	/ 2000 lb/ton x	12.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	10,000,000	ton/yr x	0.0024 lb/ton	/ 2000 lb/ton x	12.00 tons/yr	AP-42 Ch.11.19.2 (8/04)
Screening	10,000,000	ton/yr x	0.0087 lb/ton	/ 2000 lb/ton x	43.50 tons/yr	AP-42 Ch.11.19.2 (8/04)
Conveyor Transfer	10,000,000	ton/yr x	0.0011 lb/ton	/ 2000 lb/ton x	5.50 tons/yr	AP-42 Ch.11.19.2 (8/04)
<b>Total PM-10 emissions:</b>					<b>76.5 tons/yr</b>	

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

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

**Source Background and Description**

<b>Source Name:</b>	<b>Mulzer Crushed Stone, Inc. (Cape Sandy Facility)</b>
<b>Source Location:</b>	<b>RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137</b>
<b>County:</b>	<b>Crawford</b>
<b>SIC Code:</b>	<b>1422</b>
<b>Operation Permit No.:</b>	<b>T 025-7484-00002</b>
<b>Operation Permit Issuance Date:</b>	<b>December 17, 1999</b>
<b>Permit Renewal No.:</b>	<b>T 025-18843-00002</b>
<b>Permit Reviewer:</b>	<b>Michael S. Schaffer</b>

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Mulzer Crushed Stone, Inc. (Cape Sandy Facility) relating to the operation of a stationary limestone crushing and processing source.

**Source Definition**

The source definition from the previous Part 70 Operating Permit was incorporated into the proposed permit as follows:

This stationary limestone crushing and processing company consists of five (5) plants:

- (a) Stationary Plant 1 is located at RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137;
- (b) Stationary Plant 1A is located at RR1, Box 222, Alton County Road, Leavenworth, Indiana 47317;
- (c) Stationary Plant 2 is located at RR1, Box 222, Alton County Road, Leavenworth, Indiana 47317;
- (d) Stationary Plant 2A (formerly Portable Plant 2) is located at RR1, Box 222, Alton County Road, Leavenworth, Indiana 47317; and
- (e) Stationary Sand Plant is located at RR1, Box 222, Alton County Road, Leavenworth, Indiana 47317.

Since the five (5) plants are located on contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

Separate Part 70 permits for administrative purposes will no longer be necessary for this source since the source has elected to remove the portability of Portable Plant 2 (now Stationary Plant 2A). As a result, upon issuance of this Part 70 Operating Permit Renewal, a revocation of T 025-10885-05199, issued on December 17, 1999 will also be issued.

### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

#### Stationary Plant 1

- (a) One (1) primary crusher, known as 1-C-1, installed in 1986, capacity: 1,200 tons of limestone per hour.
- (b) One (1) secondary crusher, known as 1-C-2, installed in 1986, capacity: 750 tons of limestone per hour.
- (c) Two (2) tertiary crushers (A & B), known as 1-C-3, installed in 1962 and 1987 (1-C-3A was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each.
- (d) Two (2) quaternary crushers (A & B), known as 1-C-4, installed in 1962 and 1988 (1-C-4A was replaced with identical equipment in 1988), capacity: 120 tons of limestone per hour, each.
- (e) Three (3) conveyors, known as 1-TP-1, installed in 1986, capacity: 1,500 tons of limestone per hour, each.
- (f) Nine (9) conveyors, known as 1-TP-2, installed in 1986, capacity: 1,200 tons of limestone per hour, each.
- (g) Fifteen (15) conveyors, known as 1-TP-3, installed in 1986, capacity: 1,000 tons of limestone per hour each.
- (h) One (1) truck loading and unloading operation, known as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour.
- (i) One (1) bin, installed in 1996, capacity: 150 tons of limestone.
- (j) One (1) primary screen, known as 1-S-1, installed in 1986, capacity: 1,200 tons of limestone per hour.
- (k) One (1) secondary screen, known as 1-S-2, installed in 1988, capacity: 1,250 tons of limestone per hour.
- (l) Six (6) tertiary screens (A-F), known as 1-S-3A through 1-S-3F, installed in 1986, capacity: 820 tons of limestone per hour, each.
- (m) One (1) final screen, known as 1-S-4, installed in 1986, capacity: 770 tons of limestone per hour.
- (n) One (1) rock wash operation, known as 1-RW-1, consisting of dewatering screws, a multi-deck screen and four (4) conveyors, installed in 1988, capacity: 1,250 tons of limestone per hour.

#### Stationary Plant 1A

- (o) One (1) primary crusher, known as 1A-C-1, installed in 1962, capacity: 800 tons of limestone per hour.

- (p) One (1) secondary crusher, known as 1A-C-2, installed in 1966 (replaced with identical equipment in 1992), capacity: 500 tons of limestone per hour.
- (q) One (1) tertiary crusher, known as 1A-C-3, installed in 1992, capacity: 400 tons of limestone per hour.
- (r) One (1) primary screen, known as 1A-S-1, installed in 1992, capacity: 800 tons of limestone per hour.
- (s) Two (2) final screens (A & B), known as 1A-S-2, installed in 1992, capacity: 500 tons of limestone per hour total.
- (t) Five (5) conveyors, known as 1A-TP-1, installed in 1992, capacity: 1,000 tons of limestone per hour, each.
- (u) Five conveyors, known as 1A-TP-2, installed in 1992, capacity: 800 tons of limestone per hour, each.
- (v) Seven (7) conveyors, known as 1A-TP-3, installed in 1992, capacity: 500 tons of limestone per hour, each.
- (w) One (1) truck loading and unloading operation, known as 1A-TU-1, installed in 1992, including one (1) bin loading operation, installed 1996, capacity: 1,200 tons of limestone per hour.

## **Stationary Plant 2**

- (x) One (1) primary crusher, known as 2-C-1, installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour.
- (y) One (1) secondary crusher, known as 2-C-2, installed in 1980, capacity: 900 tons of limestone per hour.
- (z) One (1) tertiary crusher, known as 2-C-3, installed in 1980, capacity: 750 tons of limestone per hour.
- (aa) Two (2) quaternary crushers (A & B), known as 2-C-4, installed in 1980 (2-C-4A was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each.
- (bb) Three (3) conveyors, known as 2-TP-1, installed in 1980, capacity: 1,500 tons of limestone per hour, each.
- (cc) Six (6) conveyors, known as 2-TP-2, installed in 1980, capacity: 1,200 tons of limestone per hour.
- (dd) Eight (8) conveyors, known as 2-TP-3, installed in 1980, capacity: 1,000 tons of limestone per hour, each.
- (ee) One (1) primary screen, known as 2-S-1, installed in 1980, capacity: 1,050 tons of limestone per hour.
- (ff) One (1) secondary screen, known as 2-S-2, installed in 1980, capacity: 1,150 tons of limestone per hour.

- (gg) One (1) tertiary screen, known as 2-S-3, installed in 1980, capacity: 1,245 tons of limestone per hour.
- (hh) Five (5) quaternary screens (A - E), known as 2-S-4, installed in 1980, capacity: 1,195 tons of limestone per hour.
- (ii) Two (2) truck loading operations, known as 2-TL-1 and 2-TL-2, installed in 1980, capacity: 1,200 tons of limestone per hour.

### **Stationary Plant 2A**

- (jj) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998.
- (kk) One (1) feeder, known as AK 1403, installed in 1998, capacity: 390 tons of limestone per hour.
- (ll) One (1) secondary crusher, known as AI 1402, installed in 1998, capacity: 390 tons of limestone per hour.
- (mm) One (1) screen, known as AK 1404, installed in 1998, capacity: 390 tons of limestone per hour.
- (nn) Three (3) stackers, known as LP-TP-3, installed in 1998, capacity: 300 tons of limestone per hour each.
- (oo) Four (4) conveyors, known as LP-TP-1, installed in 1998, capacity: 390 tons of limestone per hour, each.
- (pp) One (1) No. 2 fuel oil-fired intermittent electric generator, known as EU AG 1402, capacity: 7.40 million British thermal units per hour.
- (qq) Six (6) conveyors, known as LP-TP-2, installed in 1998, capacity: 300 tons of limestone per hour, each.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted emission units operating at this source during this review process.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (b) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (c) Equipment used exclusively for the following: Packaging lubricants and greases.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) Emergency generators as follows: Gasoline generators not exceeding 110 horsepower.

- (f) Maintenance shop used oil heaters.
- (g) One (1) wet lime aggregate sand classifying plant, known as Sand Plant (SP), and storage pile created in 1993, capacity: 300 tons of limestone per hour.

### Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) Part 70 Operating Permit T 025-7484-00002, issued on December 17, 1999;
- (b) Part 70 Operating Permit T 025-10885-05199, issued on December 17, 1999;
- (c) First Reopening 025-13172-00002, issued on January 28, 2002; and
- (d) First Reopening 025-13171-05199, issued on January 28, 2002.

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

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit:

Frequency of Visible Emissions Notations: As part of this Part 70 Operating Permit, visible emissions notations for the crushers, screens, and conveyors at this source will be required to be performed once per day during normal daylight operations instead of the previously required once per shift frequency.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 Operating Permit:

- (a) T 025-7484-00002, issued on December 17, 1999:
  - (1) Conditions D.1.7(a) and D.2.3(a): To document compliance with the applicable 40 CFR 60, Subpart OOO opacity limitations for crushing, screening and conveying, the Permittee was required to maintain records of opacity notations.  
  
Reason not incorporated: Opacity notations are not required by 40 CFR 60, Subpart OOO except for the performance tests that were required in Conditions D.1.5 and D.2.5. Therefore, records of opacity notations will not be included in this Part 70 Operating Permit Renewal.
  - (2) Conditions D.1.5 and D.2.6: Opacity testing for crushing (1-C-1, 1-C-2, 1-C-3, and 1A-C-3), screening (1-S-1, 1-S-2, 1-S-3A, 1-S-F, 1A-S-1, and 1A-S-2), and conveying (1-TP-1, 1-TP-2, 1-TP-3, 1A-TP-1, 1A-TP-2, and 1A-TP-3) operations shall be performed within five (5) years from the date of the last compliance demonstration and shall be repeated once every five (5) years from the date of the compliance demonstration.  
  
Reason not incorporated: IDEM, OAQ inspectors will be performing the Method 9 opacity tests for these emission units during random inspections of the source. Therefore, these testing requirements will not be included in the Part 70 Operating Permit Renewal.

(b) T 025-10885-05199, issued on December 17, 1999:

- (1) Condition D.1.1: Pursuant to 326 IAC 6-1-2(g), the portable plant shall comply with 326 IAC 2, 326 IAC 5-1 and 326 IAC 6-4.

Reason not incorporated: Since Portable Plant 2 has been redesignated as Stationary Plant 2A in Crawford County, the plant will no longer be required to operate under the particulate requirements of 326 IAC 6-1 (County Specific Particulate Limitations). The source will still be required to comply with 326 IAC 2, 326 IAC 5-1, 326 IAC 6-3-2, and 326 IAC 6-4 in this Part 70 Operating Permit Renewal, but not under the requirements of 326 IAC 6-1-2(g).

- (2) Condition D.1.2: Any change or modification which may increase potential to emit to one hundred (100) tons per year from this portable plant, shall cause this plant to be considered a major source under Emission Offset, 326 IAC 2-3, and shall require approval from IDEM, OAQ prior to making the change.

Reason not incorporated: Since Portable Plant 2 has been redesignated as Stationary Plant 2A in Crawford County, the plant is no longer able to be located in a nonattainment county. Therefore, emissions from the plant will be evaluated under the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) rather than 326 IAC 2-3 (Emission Offset).

- (3) Condition D.1.4:

(A) The total input of No. 2 distillate fuel oil to the intermittent electric generator shall be limited to 36,836.9 gallons per month. This fuel limit is equivalent to 99.0 tons of NO<sub>x</sub> per year. Therefore, the requirements of 326 IAC 2-3 do not apply.

(B) The requirement from CP 025-9062-00002, issued January 15, 1998, Condition No. 8, required that No. 2 distillate fuel usage at this portable secondary crushing plant specifically the intermittent electric generator be limited to 126,300 gallons per 365 consecutive day period rolled on a daily basis. The fuel usage limitation was equivalent to 39 tons per 365 consecutive day period rolled on a daily basis. Therefore, the Prevention of Significant Deterioration (PSD) Rules, 326 IAC 2-2 did not apply.

The fuel usage limit is not applicable because IDEM, OAQ has determined that the PSD definition for this source should not have included the potential fugitive emissions after controls. Therefore, the fuel usage limit has been changed to 442,043 gallons per year (36,836.9 gallons per month) equivalent to 99.0 tons of NO<sub>x</sub> per year. The portable plant will be limited to relocation in nonattainment counties, but not in the severe nonattainment counties of Lake and Porter.

Reason not incorporated: Since Portable Plant 2 has been redesignated as Stationary Plant 2A in Crawford County, the plant is no longer able to be located in a nonattainment county. Therefore, emissions from the plant will be evaluated under the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) rather than 326 IAC 2-3 (Emission Offset). In addition, the potential to emit NO<sub>x</sub> from the entire source is less than two hundred fifty (250) tons per year. There-

fore, a fuel usage limit on the intermittent electric generator will not be included in the Part 70 Operating Permit Renewal.

- (4) Condition D.1.7: Opacity testing for crushing (AI 1402), screening (AK 1404), and conveying (LP-TP-1, LP-TP-2, and LP-TP-3) operations shall be performed within five (5) years from the date of the last compliance demonstration and shall be repeated once every five (5) years from the date of the compliance demonstration.

Reason not incorporated: IDEM, OAQ inspectors will be performing the Method 9 opacity tests for these emission units during random inspections of the source. Therefore, these testing requirements will not be included in the Part 70 Operating Permit Renewal.

- (5) Condition D.1.9(a): To document compliance with the applicable 40 CFR 60, Subpart OOO opacity limitations for crushing, screening and conveying, the Permittee was required to maintain records of opacity notations.

Reason not incorporated: Opacity notations are not required by 40 CFR 60, Subpart OOO except for the performance tests that were required in Condition D.1.7. Therefore, records of opacity notations will not be included in this Part 70 Operating Permit Renewal.

- (6) Condition D.1.9(c): To document compliance with Condition D.1.4, the Permittee shall maintain records at the source of the No. 2 fuel usage.

Reason not incorporated: Since the fuel usage limitation will not be included in the Part 70 Operating Permit Renewal, the record keeping of No. 2 fuel oil usage at this source is no longer necessary.

- (7) Condition D.1.10(b): A quarterly summary to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the amounts of No. 2 fuel oil used each month.

Reason not incorporated: Since the fuel usage limitation will not be included in the Part 70 Operating Permit Renewal, the quarterly reporting of No. 2 fuel oil usage at this source is no longer necessary.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

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

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

An administratively complete Part 70 permit renewal application for the purposes of this review was received on March 19, 2004. Additional information was received on July 22 and 26, 2004.

**Emission Calculations**

See Page 1 through 18 of 18 in Appendix A of this document for detailed emission calculations.

**Potential to Emit of the Source**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source 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.”

The source was issued two (2) Part 70 Operating Permits on December 17, 1999. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 Operating Permits and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Stationary Plant 1 (nonfugitive only)	56.9	56.9	-	-	-	-	-
Stationary Plant 1A (nonfugitive only)	56.9	56.9	-	-	-	-	-
Stationary Plant 2 (nonfugitive only)	56.9	56.9	-	-	-	-	-
Stationary Plant 2A (nonfugitive only, including intermittent generator)	47.1	45.7	16.4	2.92	27.6	104	Negligible
Insignificant Activities	2.50	2.50	-	0.75	-	-	0.750
Total Emissions	220.5	220.5	16.4	3.67	27.6	104	0.750

As part of this Part 70 Operating Permit Renewal emissions will be limited from each plant as follows:

- (a) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 1 shall each not exceed 13.0 pounds per hour, equivalent to 56.9 tons of PM and PM<sub>10</sub> per year;
- (b) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 1A shall each not exceed 13.0 pounds per hour, equivalent to 56.9 tons of PM and PM<sub>10</sub> per year;

- (c) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 2 shall each not exceed 13.0 pound per hour, equivalent to 56.9 tons of PM and PM<sub>10</sub> per year; and
- (d) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 2A, excluding the No. 2 fuel oil fired intermittent generator, shall each not exceed 10.0 pounds per hour, equivalent to 43.8 tons of PM and PM<sub>10</sub> per year.

Note that in order to comply with the emission limitations in paragraphs (a) through (d), the source will be required to use a wet stone process and/or a continuous wet suppression systems at all times when the crushing, screening, and conveying processes at each plant are in operation.

Compliance with the emission limitations in paragraphs (a) through (d) will insure that the nonfugitive PM and PM<sub>10</sub> emissions from the entire source will not exceed a total of 250 tons of PM and PM<sub>10</sub> per year and will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	-
PM <sub>10</sub> *	149
SO <sub>2</sub>	-
VOC	-
CO	-
NO <sub>x</sub>	-
HAPs	-

\* The emissions reported by Mulzer Crushed Stone, Inc. (Cape Sandy Facility) in their 2001 emission state were based on a source-wide production rate and uncontrolled AP-42 emission factors. Mulzer Crushed Stone, Inc. (Cape Sandy Facility) did not take into account that the crushers, screens and conveyors are controlled by use of a wet stone process and/or the operation of continuous wet suppression system at all times when the crushers, screens, and conveyors are in operation.

### County Attainment Status

The source is located in Crawford County.

Pollutant	Status
PM <sub>2.5</sub>	Attainment
PM <sub>10</sub>	Attainment

Pollutant	Status
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Crawford County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> 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 of this document.
- (b) Crawford County has been classified as unclassifiable or attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as surrogate for PM<sub>2.5</sub> emissions. See the State Rule Applicability - Entire Source section of this document.
- (c) Crawford County has been classified as attainment or unclassifiable for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, and Lead. Therefore, these 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 of this document.
- (d) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability. Note that NSPS Subpart OOO went into effect on August 31, 1983.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

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

### Federal Rule Applicability

- (a) This Part 70 Operating Permit Renewal does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for PM and PM<sub>10</sub>:
- (1) with the potential to emit before controls equal to or greater than the major source threshold for PM and PM<sub>10</sub>,
  - (2) that is subject to an emission limitation or standard for PM and PM<sub>10</sub>, and
  - (3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

The wet suppression system that is used at this source is not considered water and/or limestone injection and thus will be considered a passive control measure used to demonstrate compliance with the 326 IAC 2-2 emission limitations. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this Part 70 Operating Permit Renewal.

- (b) There are facilities at this limestone processing source that were constructed after August 31, 1983 and operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour. Pursuant to 40 CFR 60.670(c)(2) the crushers, screens, and conveyors that operate at crushed stone plants with capacities greater than 136 megagrams (150 tons) per hour, constructed after August 31, 1983, are subject to New Source Performance Standard, 326 IAC 12, (40 CFR 60.670 - 676, Subpart OOO).

### Stationary Plant 1

- (1) The crushing operations, identified as 1-C-1, 1-C-2, 1-C-3B, and 1-C-4B, shall be limited to fifteen percent (15%) opacity or less.
- (2) The screening operations identified as 1-S-1, 1-S-2, 1-S-3A through 1-S-3F and 1-S-4, as well as conveying operations, identified as 1-TP-1, 1-TP-2, and 1-TP-3 shall be limited to ten percent (10%) or less.
- (3) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 1 shall be exempt from the requirements of 40 CFR 60.672.
- (4) Pursuant to 40 CFR 60.670(d)(1), if an existing facility is replaced by a piece of equipment of equal or smaller size, has the same function as the existing facility, and is not the replacement of all facilities on a production line, the new facility is exempt from the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675. Therefore, pursuant to 40 CFR 60.670(d)(2), the Permittee will be required in this renewal to submit the following information required in 40 CFR 60.676(a):

Pursuant to 40 CFR 60.676(a)(1), the Permittee was required submit to IDEM OAQ, the following information about tertiary crusher (1-C-3A), constructed in 1962 and replaced with identical equipment in 1987, quaternary crusher (1-C-4A) constructed in 1962 and replace with identical equipment in 1988:

- (A) The rated capacity in megagrams or tons per hour of the tertiary and quaternary crushers, each constructed in 1962, and

- (B) The rated capacity in tons per hour of the tertiary crusher, constructed in 1987 and the quaternary crusher, constructed in 1988.

The source submitted the above information to IDEM, OAQ on December 11, 1996 in the application for T 025-7484-00002, issued on December 17, 1999. IDEM, OAQ has verified that the source has complied with the requirements of 40 CFR 676(a)(1), which renders the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675, Subpart OOO not applicable to tertiary crusher (1-C-3A) and quaternary crusher (1-C-4A).

### **Stationary Plant 1A**

- (5) The crushing operation, identified as 1A-C-3 shall be limited to fifteen percent (15%) opacity or less.
- (6) The screening operations identified as 1A-S-2A and 1A-S-2B, as well as conveying operations, identified as 1A-TP-1, 1A-TP-2, and 1A-TP-3 shall be limited to ten percent (10%) or less.
- (7) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 1A shall be exempt from the requirements of 40 CFR 60.672.
- (8) Pursuant to 40 CFR 60.670(d)(1), if an existing facility is replaced by a piece of equipment of equal or smaller size, has the same function as the existing facility, and is not the replacement of all facilities on a production line, the new facility is exempt from the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675. Therefore, pursuant to 40 CFR 60.670(d)(2), the Permittee is required to submit the following information required in 40 CFR 60.676(a):

Pursuant to 40 CFR 60.676(a)(1), the Permittee was required submit to IDEM OAQ, the following information about secondary crusher (1A-C-2), constructed in 1966 and replaced with identical equipment in 1992:

- (A) The rated capacity in megagrams or tons per hour of the secondary crusher constructed in 1966, and
- (B) The rated capacity in tons per hour of the secondary crusher, constructed in 1992.

The source submitted the above information to IDEM, OAQ on December 11, 1996 in the application for T 025-7484-00002, issued on December 17, 1999. IDEM, OAQ has verified that the source has complied with the requirements of 40 CFR 676(a)(1), which renders the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675, Subpart OOO not applicable to secondary crusher (1A-C-2).

Note that the requirements of NSPS Subpart OOO will not be included in this permit for the primary crusher, identified 1A-C-1. Construction of this emission units commenced prior to August 31, 1983.

### **Stationary Plant 2**

- (9) The requirements of NSPS Subpart OOO will not be included in this permit for all of the crushers, screens, and conveyors at Stationary Plant 2 except for primary

crusher (2-C-1) and quaternary crusher (2-C-4A). Construction of all of the crushers, screens, and conveyors at Stationary Plant 2 except for primary crusher (2-C-1) and quaternary crusher (2-C-4A) commenced prior to August 31, 1983.

- (10) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 2 shall be exempt from the requirements of 40 CFR 60.672.
- (11) Pursuant to 40 CFR 60.670(d)(1), if an existing facility is replaced by a piece of equipment of equal or smaller size, has the same function as the existing facility, and is not the replacement of all facilities on a production line, the new facility is exempt from the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675. Therefore, pursuant to 40 CFR 60.670(d)(2), the Permittee is required to submit the following information required in 40 CFR 60.676(a):

Pursuant to 40 CFR 60.676(a)(1), the Permittee was required submit to IDEM OAQ, the following information about primary crusher (2-C-1), constructed in 1966, replaced with identical equipment in 1992, and quaternary crusher (2-C-4A), constructed in 1980, replaced with identical equipment in 1987:

- (A) The rated capacity in megagrams or tons per hour of the primary crusher and quaternary crusher, constructed in 1966 and 1980 respectively, and
- (B) The rated capacity in tons per hour of the primary crusher, constructed in 1992, and the quaternary crusher, constructed in 1987.

The source submitted the above information to IDEM, OAQ on December 11, 1996 in the application for T 025-7484-00002, issued on December 17, 1999. IDEM, OAQ has verified that the source has complied with the requirements of 40 CFR 676(a)(1), which renders the requirements of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675, Subpart OOO not applicable to primary crusher (2-C-1) and quaternary crusher (2-C-4A).

#### **Stationary Plant 2A**

- (12) The crushing operations, identified as AI 1402, shall be limited to fifteen percent (15%) opacity or less.
- (13) The screening operations identified as AK 1404 as well as conveying operations, identified as LP-TP-1, LP-TP-2, and LP-TP-3 shall be limited to ten percent (10%) or less.
- (14) Truck dumping into any crusher, screen, or feed hopper at Stationary Plant 2A is exempt from the requirements of 40 CFR 60.672.

#### **Insignificant Stationary Sand Plant**

- (15) This plant is not subject to the requirements of 40 CFR 60, Subpart OOO because pursuant to 40 CFR 60.670(a)(2), the plant is equipped with stand alone screening and no crushers or conveyors.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

### State Rule Applicability – Entire Source

#### 326 IAC 1-5-2 (Emergency Reduction Plans)

The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 11, 1996.

#### 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

- (a) The tertiary crusher, identified as 1-C-3A, primary crusher, identified as 1A-C-1, and secondary crusher, identified as 1A-C-2, were constructed prior to August 7, 1977. Therefore, a PSD permit pursuant to 326 IAC 2-2 was not required for these emission units.
- (b) The remaining crushers, screens and conveyors at this source were constructed after August 7, 1977. The potential to emit from all of the crushers, screens, and conveyors at this source is less than a total of 250 tons of PM and PM<sub>10</sub> per year after controls and this source is subject to an NSPS that has an applicability date that is after August 7, 1980. Therefore, this source has been operating as a minor source under PSD rules and a PSD permit for the remaining crushers screens and conveyors that were constructed after August 7, 1977 was not required.

However, since the potential to emit of the nonfugitive emissions of PM and PM<sub>10</sub> from the entire source before controls are greater than 250 tons per year each, the PM and PM<sub>10</sub> emissions shall be limited in the Part 70 Operating Permit Renewal as follows:

- (1) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 1 shall not exceed 13.0 pounds per hour, equivalent to 56.9 tons of PM and PM<sub>10</sub> per year;
- (2) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 1A shall not exceed 13.0 pounds per hour, equivalent to 56.9 tons of PM and PM<sub>10</sub> per year;
- (3) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 2 shall each not exceed 13.0 pound per hour, equivalent to 56.9 tons of PM and PM<sub>10</sub> per year; and
- (4) The PM/PM<sub>10</sub> emissions from the nonfugitive emission units at Stationary Plant 2A, excluding the No. 2 fuel oil fired intermittent generator, shall each not exceed 10.0 pounds per hour, equivalent to 43.8 tons of PM and PM<sub>10</sub> per year.

Compliance with the emission limitations in paragraphs (a) through (d) will insure that the nonfugitive PM and PM<sub>10</sub> emissions from the entire source will not exceed a total of 250 tons of PM and PM<sub>10</sub> per year and will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

#### 326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1, beginning in 2006 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in the 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.

### 326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires that the source not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

### 326 IAC 6-5 (Fugitive Particulate Matter Emissions Limitations)

This rule requires a fugitive dust plan to be submitted since this source has a potential to emit fugitive particulate matter that is greater than twenty-five (25) tons per year.

- (a) The plan for Stationary Plants 1, 1A, and 2 was submitted, reviewed, and approved on August 18, 1998, and consists of using a water truck to water haul roads and stock piles as necessary.
- (b) The plan for Stationary Plant 2A (formerly Portable Plant 2) was submitted, reviewed, and approved on September 30, 1997, and consists of applying water on storage piles, unpaved roadways, material loading and unloading operations on an "as needed" basis.

The source will comply with all dust abatement measures contained therein.

## **State Rule Applicability – Individual Facilities**

### 326 IAC 2-4.1-1 (New Source Toxics Control)

The equipment in Stationary Plant 2A is the only equipment at this source that was constructed after July 27, 1997. The potential to emit any single HAP from Stationary Plant 2A is less than ten (10) tons per year and the potential to emit any combination of HAPs from Stationary Plant 2A is less than twenty-five tons per year. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable

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

- (a) Pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from Stationary Plant 1, Stationary Plant 1A, Stationary Plant 2, and Stationary Plant 2A may exceed the pound per hour limitation calculated by the following equation, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

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

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

- (b) Pursuant to 326 IAC 6-3-1(b)(14), Sand Plant (SP) is exempt from the requirements of 326 IAC 6-3-2 because the plant has a potential to emit less than 0.551 pounds of particulate per hour.

#### 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations)

The potential to emit SO<sub>2</sub> from the entire source is less than twenty-five (25) tons per year and ten (10) pounds per hour. Therefore, the requirements of 326 IAC 7-1.1 are not applicable.

#### Testing Requirements

All testing requirements from previous approvals have not been included in this Part 70 Operating Permit Renewal since IDEM, OAQ inspectors will be performing the Method 9 opacity tests for crushing (1-C-1, 1-C-2, 1-C-3A, 1-C-3B, 1-C-4A, 1-C-4B, 1A-C-3, and AI 1402), screening (1-S-1, 1-S-2, 1-S-3A through 1-S-3F, 1-S-4, 1A-S-2A, 1A-S-2B, and AK 1404), and conveying (1-TP-1, 1-TP-2, 1-TP-3, 1A-TP-1, 1A-TP-2, 1A-TP-3, LP-TP-1, LP-TP-2, and LP-TP-3) operations during random inspections of the source.

Opacity tests conducted in order to demonstrate compliance with NSPS Subpart OOO were performed March 17, 2003 for all plants. These tests showed that the crushers, screens, and conveyors were in compliance with their permit requirements for opacity.

#### Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less 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 requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions 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 monitoring requirements applicable to this source are as follows:

The crushers, screens, and conveyors at this source have applicable compliance monitoring conditions as specified below:

Visible emissions notations of crushing (1-C-1, 1-C-2, 1-C-3A, 1-C-3B, 1-C-4A, 1-C-4B, 1A-C-1, 1A-C-2, 1A-C-3, 2-C-1, 2-C-2, 2-C-3, 2-C-4A, 2-C-4B and AI 1402), screening (1-S-1, 1-S-2, 1-S-3A through 1-S-3F, 1-S-4, 1A-S-2A, 1A-S-2B, 2-S-1, 2-S-2, 2-S-3, 2-S-4A through 2-S-4E and AK 1404), and conveying (1-TP-1, 1-TP-2, 1-TP-3, 1A-TP-1, 1A-TP-2, 1A-TP-3, 2-TP-1, 2-TP-2, 2-TP-3, LP-TP-1, LP-TP-2, and LP-TP-3) operations shall be performed once per day during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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 start up or shut down time. 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. 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. If abnormal emissions are observed at any crusher, screen, or conveyor, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances.

These monitoring conditions are necessary to ensure compliance with 40 CFR 60, Subpart OOO, 326 IAC 2-2, 326 IAC 5-1, 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70).

## **Conclusion**

The operation of this limestone crushing and processing source shall be subject to the conditions of this Part 70 Renewal permit T 025-18843-00002.

**Appendix A: Emission Calculations  
Stone Quarry and Processing**

**Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)**  
**Address City IN Zip: RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137**  
**Permit Number: T 025-18843**  
**Plant ID: 025-00002**  
**Reviewer: Michael S. Schaffer**  
**Application Date: March 19, 2004**

**Stationary Plant 1**

\* \* PM emissions before controls \* \*

Storage		** see page 2 **				0.00 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 3 **				613.35 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	1,200 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.50 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	1,200 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.68 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	750 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	16.56 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary and quaternary)*	740 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	16.34 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening*	1,250 ton/hr x		0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	172.46 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	1,500 ton/hr x		0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	19.32 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM emissions before controls:</b>						<b>850.20 tons/yr</b>	

\*PM emission factors are calculated by multiplying the PM-10 emission factors by 2.1 for those emissions factors associated with AP-42 Ch.11.19.2

\* \* PM emissions after controls \* \*

Storage	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Transporting	613.35 tons/yr x	50% emitted after controls =	306.67 tons/yr
Loading & Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	16.56 tons/yr x	10% emitted after controls =	1.66 tons/yr
Crushing (tertiary and quaternary)	16.34 tons/yr x	10% emitted after controls =	1.63 tons/yr
Screening	172.46 tons/yr x	10% emitted after controls =	17.25 tons/yr
Conveying	19.32 tons/yr x	10% emitted after controls =	1.93 tons/yr
<b>Total PM emissions after controls:</b>			<b>338.01 tons/yr</b>

\* \* PM-10 emissions before controls \* \*

Storage		** see page 2 **				4.90 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 3 **				181.04 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	1,200 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.50 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	1,200 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.68 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	750 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	7.88 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary and quaternary)	740 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	7.78 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	1,250 ton/hr x		0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	82.13 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	1,500 ton/hr x		0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	9.20 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM-10 emissions before controls:</b>						<b>305.10 tons/yr</b>	

\* \* PM-10 emissions after controls \* \*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	181.04 tons/yr x	50% emitted after controls =	90.52 tons/yr
Loading & Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	7.88 tons/yr x	10% emitted after controls =	0.79 tons/yr
Crushing (tertiary and quaternary)	7.78 tons/yr x	10% emitted after controls =	0.78 tons/yr
Screening	82.13 tons/yr x	10% emitted after controls =	8.21 tons/yr
Conveying	9.20 tons/yr x	10% emitted after controls =	0.92 tons/yr
<b>Total PM-10 emissions after controls:</b>			<b>110.57 tons/yr</b>

\*\* fugitive vs. nonfugitive PM Emissions\*\*

Storage	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Transporting	613.35 tons/yr x	50% emitted after controls =	306.67 tons/yr
Loading / Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Total fugitive PM emissions:			315.17 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	16.56 tons/yr x	10% emitted after controls =	1.66 tons/yr
Crushing (tertiary and quaternary)	16.34 tons/yr x	10% emitted after controls =	1.63 tons/yr
Screening	172.46 tons/yr x	10% emitted after controls =	17.25 tons/yr
Conveying:	19.32 tons/yr x	10% emitted after controls =	1.93 tons/yr
Total nonfugitive PM emissions:			22.83 tons/yr

\*\* fugitive vs. nonfugitive PM-10 Emissions\*\*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	181.04 tons/yr x	50% emitted after controls =	90.52 tons/yr
Loading / Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Total fugitive PM-10 emissions:			99.51 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	7.88 tons/yr x	10% emitted after controls =	0.79 tons/yr
Crushing (tertiary and quaternary)	7.78 tons/yr x	10% emitted after controls =	0.78 tons/yr
Screening	82.13 tons/yr x	10% emitted after controls =	8.21 tons/yr
Conveying:	9.20 tons/yr x	10% emitted after controls =	0.92 tons/yr
Total nonfugitive PM-10 emissions:			11.07 tons/yr

\*\* storage \*\*

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15)$$

$$= 1.85 \text{ lb/acre/day}$$

where s = 1.6 % silt content of material  
 p = 125 days of rain greater than or equal to 0.01 inches  
 f = 15 % of wind greater than or equal to 12 mph

$$E_p(\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$$

$$= 0.00 \text{ tons/yr}$$

where sc = 0 ,000 tons storage capacity

\*\* unpaved roads \*\*

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Note that average silt content divides evenly by two since same amount of trips are made for each type of vehicle

$$\frac{25 \text{ total trip/hr} \times 0.5 \text{ miles/round trip} \times 8760 \text{ hr/yr}}{109500 \text{ miles per year}}$$

**PM Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.7} \left[ \frac{W}{3} \right]^b$$

= 17.04 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{17.04 \text{ lb/mi} \times 109500 \text{ mi/yr}}{2000 \text{ lb/ton}} = 932.80 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \left[ \frac{365-p}{365} \right]$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

613.35 tons/yr

**PM-10 Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.9} \left[ \frac{W}{3} \right]^b$$

= 5.03 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{5.03 \text{ lb/mi} \times 109500 \text{ mi/yr}}{2000 \text{ lb/ton}} = 275.33 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \left[ \frac{365-p}{365} \right]$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

181.04 tons/yr

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

$$E_f = k(0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$$
$$= 0.0016 \text{ lb/ton}$$

where k = 0.74 (particle size multiplier)  
U = 10 mile/hr mean wind speed  
M = 5 % material moisture content

**Appendix A: Emission Calculations  
Stone Quarry and Processing**

**Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)**  
**Address City IN Zip: RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137**  
**Permit Number: T 025-18843**  
**Plant ID: 025-00002**  
**Reviewer: Michael S. Schaffer**  
**Application Date: March 19, 2004**

**Stationary Plant 1A**

\*\* PM emissions before controls \*\*

Storage		** see page 6 **				0.74 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 7 **				392.54 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	1,200 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.50 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	800 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.45 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	500 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	11.04 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)*	400 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.83 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening*	800 ton/hr x		0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	110.38 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	1,000 ton/hr x		0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	12.88 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM emissions before controls:</b>						<b>547.36 tons/yr</b>	

\*PM emission factors are calculated by multiplying the PM-10 emission factors by 2.1 for those emissions factors associated with AP-42 Ch.11.19.2

\*\* PM emissions after controls \*\*

Storage	0.74 tons/yr x	10% emitted after controls =	0.07 tons/yr
Transporting	392.54 tons/yr x	50% emitted after controls =	196.27 tons/yr
Loading & Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Crushing (primary)	2.45 tons/yr x	10% emitted after controls =	0.25 tons/yr
Crushing (secondary)	11.04 tons/yr x	10% emitted after controls =	1.10 tons/yr
Crushing (tertiary)	8.83 tons/yr x	10% emitted after controls =	0.88 tons/yr
Screening	110.38 tons/yr x	10% emitted after controls =	11.04 tons/yr
Conveying	12.88 tons/yr x	10% emitted after controls =	1.29 tons/yr
<b>Total PM emissions after controls:</b>			<b>219.40 tons/yr</b>

\*\* PM-10 emissions before controls \*\*

Storage		** see page 6 **				4.90 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 7 **				115.86 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	1,200 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.50 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	800 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.45 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	500 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	5.26 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	400 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	4.20 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	800 ton/hr x		0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	52.56 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	1,000 ton/hr x		0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	6.13 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM-10 emissions before controls:</b>						<b>199.87 tons/yr</b>	

\*\* PM-10 emissions after controls \*\*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	115.86 tons/yr x	50% emitted after controls =	57.93 tons/yr
Loading & Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Crushing (primary)	2.45 tons/yr x	10% emitted after controls =	0.25 tons/yr
Crushing (secondary)	5.26 tons/yr x	10% emitted after controls =	0.53 tons/yr
Crushing (tertiary)	4.20 tons/yr x	10% emitted after controls =	0.42 tons/yr
Screening	52.56 tons/yr x	10% emitted after controls =	5.26 tons/yr
Conveying	6.13 tons/yr x	10% emitted after controls =	0.61 tons/yr
<b>Total PM-10 emissions after controls:</b>			<b>73.98 tons/yr</b>

\*\* fugitive vs. nonfugitive PM Emissions\*\*

Storage	0.74 tons/yr x	10% emitted after controls =	0.07 tons/yr
Transporting	392.54 tons/yr x	50% emitted after controls =	196.27 tons/yr
Loading / Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Total fugitive PM emissions:			204.84 tons/yr
Crushing (primary)	2.45 tons/yr x	10% emitted after controls =	0.25 tons/yr
Crushing (secondary)	11.04 tons/yr x	10% emitted after controls =	1.10 tons/yr
Crushing (tertiary)	8.83 tons/yr x	10% emitted after controls =	0.88 tons/yr
Screening	110.38 tons/yr x	10% emitted after controls =	11.04 tons/yr
Conveying:	12.88 tons/yr x	10% emitted after controls =	1.29 tons/yr
Total nonfugitive PM emissions:			14.56 tons/yr

\*\* fugitive vs. nonfugitive PM-10 Emissions\*\*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	115.86 tons/yr x	50% emitted after controls =	57.93 tons/yr
Loading / Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Total fugitive PM-10 emissions:			66.92 tons/yr
Crushing (primary)	2.45 tons/yr x	10% emitted after controls =	0.25 tons/yr
Crushing (secondary)	5.26 tons/yr x	10% emitted after controls =	0.53 tons/yr
Crushing (tertiary)	4.20 tons/yr x	10% emitted after controls =	0.42 tons/yr
Screening	52.56 tons/yr x	10% emitted after controls =	5.26 tons/yr
Conveying:	6.13 tons/yr x	10% emitted after controls =	0.61 tons/yr
Total nonfugitive PM-10 emissions:			7.06 tons/yr

\*\* storage \*\*

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15)$$

= 1.85 lb/acre/day

where s = 1.6 % silt content of material  
 p = 125 days of rain greater than or equal to 0.01 inches  
 f = 15 % of wind greater than or equal to 12 mph

$$E_p(\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$$

= 0.74 tons/yr

where sc = 60 ,000 tons storage capacity

\*\* unpaved roads \*\*

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Note that average silt content divides evenly by two since same amount of trips are made for each type of vehicle

$$\frac{16 \text{ total trip/hr} \times 0.5 \text{ miles/round trip} \times 8760 \text{ hr/yr}}{2} = 70080 \text{ miles per year}$$

**PM Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.7} \left[ \frac{W}{3} \right]^b$$

= 17.04 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{17.04 \text{ lb/mi} \times 70080 \text{ mi/yr}}{2000 \text{ lb/ton}} = 596.99 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \left[ \frac{365-p}{365} \right] = 392.54 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

**PM-10 Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.9} \left[ \frac{W}{3} \right]^b$$

= 5.03 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{5.03 \text{ lb/mi} \times 70080 \text{ mi/yr}}{2000 \text{ lb/ton}} = 176.21 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \left[ \frac{365-p}{365} \right] = 115.86 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

$$E_f = k(0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$$
$$= 0.0016 \text{ lb/ton}$$

where k = 0.74 (particle size multiplier)  
U = 10 mile/hr mean wind speed  
M = 5 % material moisture content

**Appendix A: Emission Calculations  
Stone Quarry and Processing**

**Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)**  
**Address City IN Zip: RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137**  
**Permit Number: T 025-18843**  
**Plant ID: 025-00002**  
**Reviewer: Michael S. Schaffer**  
**Application Date: March 19, 2004**

**Stationary Plant 2**

\* \* PM emissions before controls \* \*

Storage		** see page 10 **				0.00 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 11 **				1,124.05 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	1,200 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.50 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	1,200 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.68 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	900 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	19.87 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary and quarternary)*	1,490 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	32.89 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening*	1,245 ton/hr x		0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	171.77 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	1,500 ton/hr x		0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	19.32 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM emissions before controls:</b>						<b>1,380.07 tons/yr</b>	

\*PM emission factors are calculated by multiplying the PM-10 emission factors by 2.1 for those emissions factors associated with AP-42 Ch.11.19.2

\* \* PM emissions after controls \* \*

Storage	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Transporting	1,124.05 tons/yr x	50% emitted after controls =	562.02 tons/yr
Loading & Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	19.87 tons/yr x	10% emitted after controls =	1.99 tons/yr
Crushing (tertiary and quarternary)	32.89 tons/yr x	10% emitted after controls =	3.29 tons/yr
Screening	171.77 tons/yr x	10% emitted after controls =	17.18 tons/yr
Conveying	19.32 tons/yr x	10% emitted after controls =	1.93 tons/yr
<b>Total PM emissions after controls:</b>			<b>595.27 tons/yr</b>

\* \* PM-10 emissions before controls \* \*

Storage		** see page 10 **				4.90 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 11 **				331.78 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	1,200 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.50 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	1,200 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.68 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	900 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	9.46 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary and quarternary)	1,490 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	15.66 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	1,245 ton/hr x		0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	81.80 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	1,500 ton/hr x		0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	9.20 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM-10 emissions before controls:</b>						<b>464.97 tons/yr</b>	

\* \* PM-10 emissions after controls \* \*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	331.78 tons/yr x	50% emitted after controls =	165.89 tons/yr
Loading & Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	9.46 tons/yr x	10% emitted after controls =	0.95 tons/yr
Crushing (tertiary and quarternary)	15.66 tons/yr x	10% emitted after controls =	1.57 tons/yr
Screening	81.80 tons/yr x	10% emitted after controls =	8.18 tons/yr
Conveying	9.20 tons/yr x	10% emitted after controls =	0.92 tons/yr
<b>Total PM-10 emissions after controls:</b>			<b>186.85 tons/yr</b>

\*\* fugitive vs. nonfugitive PM Emissions\*\*

Storage	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Transporting	1124.05 tons/yr x	50% emitted after controls =	562.02 tons/yr
Loading / Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Total fugitive PM emissions:			570.52 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	19.87 tons/yr x	10% emitted after controls =	1.99 tons/yr
Crushing (tertiary and quarternary)	32.89 tons/yr x	10% emitted after controls =	3.29 tons/yr
Screening	171.77 tons/yr x	10% emitted after controls =	17.18 tons/yr
Conveying:	19.32 tons/yr x	10% emitted after controls =	1.93 tons/yr
Total nonfugitive PM emissions:			24.75 tons/yr

\*\* fugitive vs. nonfugitive PM-10 Emissions\*\*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	331.78 tons/yr x	50% emitted after controls =	165.89 tons/yr
Loading / Unloading	8.50 tons/yr x	100% emitted after controls =	8.50 tons/yr
Total fugitive PM-10 emissions:			174.87 tons/yr
Crushing (primary)	3.68 tons/yr x	10% emitted after controls =	0.37 tons/yr
Crushing (secondary)	9.46 tons/yr x	10% emitted after controls =	0.95 tons/yr
Crushing (tertiary and quarternary)	15.66 tons/yr x	10% emitted after controls =	1.57 tons/yr
Screening	81.80 tons/yr x	10% emitted after controls =	8.18 tons/yr
Conveying:	9.20 tons/yr x	10% emitted after controls =	0.92 tons/yr
Total nonfugitive PM-10 emissions:			11.98 tons/yr

\*\* storage \*\*

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15)$$

= 1.85 lb/acre/day

where s = 1.6 % silt content of material  
 p = 125 days of rain greater than or equal to 0.01 inches  
 f = 15 % of wind greater than or equal to 12 mph

$$E_p (\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$$

= 0.00 tons/yr

where sc = 0 ,000 tons storage capacity

\*\* unpaved roads \*\*

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Note that average silt content divides evenly by two since same amount of trips are made for each type of vehicle

$$\begin{aligned} & 24.9 \text{ total trip/hr} \times \\ & 0.92 \text{ miles/round trip} \times \\ & 8760 \text{ hr/yr} = \end{aligned} \qquad 200674.08 \text{ miles per year}$$

**PM Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.7} \left[ \frac{W}{3} \right]^b$$

= 17.04 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{17.04 \text{ lb/mi} \times 200674.08 \text{ mi/yr}}{2000 \text{ lb/ton}} = 1709.49 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot \left[ \frac{365-p}{365} \right] = 1124.05 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

**PM-10 Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.9} \left[ \frac{W}{3} \right]^b$$

= 5.03 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{5.03 \text{ lb/mi} \times 200674.08 \text{ mi/yr}}{2000 \text{ lb/ton}} = 504.57 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot \left[ \frac{365-p}{365} \right] = 331.78 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

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

= 0.0016 lb/ton

where k = 0.74 (particle size multiplier)  
U = 10 mile/hr mean wind speed  
M = 5 % material moisture content

**Appendix A: Emission Calculations  
Stone Quarry and Processing**

**Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)**  
**Address City IN Zip: RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137**  
**Permit Number: T 025-18843**  
**Plant ID: 025-00002**  
**Reviewer: Michael S. Schaffer**  
**Application Date: March 19, 2004**

**Stationary Plant 2A**

\*\* PM emissions before controls \*\*

Storage		** see page 14 **				0.00 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 15 **				352.11 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	390 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.76 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	0 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	390 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.61 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)*	0 ton/hr x		0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening*	390 ton/hr x		0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	53.81 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	390 ton/hr x		0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	5.02 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM emissions before controls:</b>						<b>422.31 tons/yr</b>	

\*PM emission factors are calculated by multiplying the PM-10 emission factors by 2.1 for those emissions factors associated with AP-42 Ch.11.19.2

\*\* PM emissions after controls \*\*

Storage	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Transporting	352.11 tons/yr x	50% emitted after controls =	176.06 tons/yr
Loading & Unloading	2.76 tons/yr x	100% emitted after controls =	2.76 tons/yr
Crushing (primary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (secondary)	8.61 tons/yr x	10% emitted after controls =	0.86 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening	53.81 tons/yr x	10% emitted after controls =	5.38 tons/yr
Conveying	5.02 tons/yr x	10% emitted after controls =	0.50 tons/yr
<b>Total PM emissions after controls:</b>			<b>185.56 tons/yr</b>

\*\* PM-10 emissions before controls \*\*

Storage		** see page 14 **				4.90 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting		** see page 15 **				103.93 tons/yr	AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	390 ton/hr x		0.0016 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.76 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Crushing (primary)	0 ton/hr x		0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	390 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	4.10 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	0 ton/hr x		0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	390 ton/hr x		0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	25.62 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	390 ton/hr x		0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.39 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM-10 emissions before controls:</b>						<b>143.71 tons/yr</b>	

\*\* PM-10 emissions after controls \*\*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	103.93 tons/yr x	50% emitted after controls =	51.96 tons/yr
Loading & Unloading	2.76 tons/yr x	100% emitted after controls =	2.76 tons/yr
Crushing (primary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (secondary)	4.10 tons/yr x	10% emitted after controls =	0.41 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening	25.62 tons/yr x	10% emitted after controls =	2.56 tons/yr
Conveying	2.39 tons/yr x	10% emitted after controls =	0.24 tons/yr
<b>Total PM-10 emissions after controls:</b>			<b>58.43 tons/yr</b>

\*\* fugitive vs. nonfugitive PM Emissions\*\*

Storage	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Transporting	352.11 tons/yr x	50% emitted after controls =	176.06 tons/yr
Loading / Unloading	2.76 tons/yr x	100% emitted after controls =	2.76 tons/yr
Total fugitive PM emissions:			178.82 tons/yr
Crushing (primary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (secondary)	8.61 tons/yr x	10% emitted after controls =	0.86 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening	53.81 tons/yr x	10% emitted after controls =	5.38 tons/yr
Conveying:	5.02 tons/yr x	10% emitted after controls =	0.50 tons/yr
Total nonfugitive PM emissions:			6.74 tons/yr

\*\* fugitive vs. nonfugitive PM-10 Emissions\*\*

Storage	4.90 tons/yr x	10% emitted after controls =	0.49 tons/yr
Transporting	103.93 tons/yr x	50% emitted after controls =	51.96 tons/yr
Loading / Unloading	2.76 tons/yr x	100% emitted after controls =	2.76 tons/yr
Total fugitive PM-10 emissions:			55.22 tons/yr
Crushing (primary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (secondary)	4.10 tons/yr x	10% emitted after controls =	0.41 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening	25.62 tons/yr x	10% emitted after controls =	2.56 tons/yr
Conveying:	2.39 tons/yr x	10% emitted after controls =	0.24 tons/yr
Total nonfugitive PM-10 emissions:			3.21 tons/yr

\*\* storage \*\*

Storage emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15)$$

= 1.85 lb/acre/day

where s = 1.6 % silt content of material  
 p = 125 days of rain greater than or equal to 0.01 inches  
 f = 15 % of wind greater than or equal to 12 mph

$$E_p(\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$$

= 0.00 tons/yr

where sc = 0 ,000 tons storage capacity

\*\* unpaved roads \*\*

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Note that average silt content divides evenly by two since same amount of trips are made for each type of vehicle

$$\begin{aligned} & 7.8 \text{ total trip/hr} \times \\ & 0.92 \text{ miles/round trip} \times \\ & 8760 \text{ hr/yr} = \end{aligned} \qquad 62861.76 \text{ miles per year}$$

**PM Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.7} \left[ \frac{W}{3} \right]^b$$

= 17.04 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{17.04 \text{ lb/mi} \times 62861.76 \text{ mi/yr}}{2000 \text{ lb/ton}} = 535.50 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot \left[ \frac{365-p}{365} \right] = 352.11 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

**PM-10 Emissions**

$$E_f = k \left[ \frac{s}{12} \right]^{0.9} \left[ \frac{W}{3} \right]^b$$

= 5.03 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)  
 s = 10 mean % silt content of haul roads in combination with plant roads = (8.3% + 10%) / 2  
 b = 0.45 Constant for PM-10 and PM-30 or TSP  
 W = 63.53 tons average vehicle weight

$$E = \frac{5.03 \text{ lb/mi} \times 62861.76 \text{ mi/yr}}{2000 \text{ lb/ton}} = 158.06 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot \left[ \frac{365-p}{365} \right] = 103.93 \text{ tons/yr}$$

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

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

= 0.0016 lb/ton

where k = 0.74 (particle size multiplier)  
U = 10 mile/hr mean wind speed  
M = 5 % material moisture content

**Appendix A: Emission Calculations  
Stone Quarry and Processing**

**Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)**  
**Address City IN Zip: RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137**  
**Permit Number: T 025-18843**  
**Plant ID: 025-00002**  
**Reviewer: Michael S. Schaffer**  
**Application Date: March 19, 2004**

**All Plants - Non Fugitive Emissions Only - PSD Definition**

\*\* PM emissions before controls \*\*

Crushing (primary)	3,200 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	9.81 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	2,540 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	56.07 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)*	2,630 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	58.06 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening*	3,685 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	508.42 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	4,390 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	56.53 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM emissions before controls:</b>					<b>688.89 tons/yr</b>	

\*PM emission factors are calculated by multiplying the PM-10 emission factors by 2.1 for those emissions factors associated with AP-42 Ch.11.19.2

\*\* PM emissions after controls \*\*

Crushing (primary)	9.81 tons/yr x	10% emitted after controls =	0.98 tons/yr
Crushing (secondary)	56.07 tons/yr x	10% emitted after controls =	5.61 tons/yr
Crushing (tertiary)	58.06 tons/yr x	10% emitted after controls =	5.81 tons/yr
Screening	508.42 tons/yr x	10% emitted after controls =	50.84 tons/yr
Conveying	56.53 tons/yr x	10% emitted after controls =	5.65 tons/yr
<b>Total PM emissions after controls:</b>			<b>68.89 tons/yr</b>

\*\* PM-10 emissions before controls \*\*

Crushing (primary)	3,200 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	9.81 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	2,540 ton/hr x	0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	26.70 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	2,630 ton/hr x	0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	27.65 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	3,685 ton/hr x	0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	242.10 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	4,390 ton/hr x	0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	26.92 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
<b>Total PM-10 emissions before controls:</b>					<b>333.18 tons/yr</b>	

\*\* PM-10 emissions after controls \*\*

Crushing (primary)	9.81 tons/yr x	10% emitted after controls =	0.98 tons/yr
Crushing (secondary)	26.70 tons/yr x	10% emitted after controls =	2.67 tons/yr
Crushing (tertiary)	27.65 tons/yr x	10% emitted after controls =	2.76 tons/yr
Screening	242.10 tons/yr x	10% emitted after controls =	24.21 tons/yr
Conveying	26.92 tons/yr x	10% emitted after controls =	2.69 tons/yr
<b>Total PM-10 emissions after controls:</b>			<b>33.32 tons/yr</b>

**Appendix A: Emission Calculations  
Internal Combustion Engines  
Turbine (> 600 HP)**

**Company Name:** Mulzer Crushed Stone, Inc. (Cape Sandy Facility)  
**Address City IN Zip:** RR1, Box 222, Alton County Road, Leavenworth, Indiana 47137  
**Permit Number:** T 025-18843  
**Plant ID:** 025-00002  
**Reviewer:** Michael S. Schaffer  
**Application Date:** March 19, 2004

**Emissions calculated based on heat input capacity (MMBtu/hr)**

Heat Input Capacity  
MM Btu/hr

S= 0.5 = WEIGHT % SULFUR

7.4

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.5 (1.01S)	3.2 **see below	0.1	0.85
Potential Emission in tons/yr	3.24	1.86	16.4	103.7	2.92	27.6

\*\*NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

1 gallon of #2 Fuel Oil has a heating value of 140,000 Btu

**Methodology**

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1 and Table 3.4-2

1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr / (2,000 lb/ton)

\*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined.