



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
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Toll Free (800) 451-6027
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TO: Interested Parties / Applicant

DATE: December 9, 2011

RE: Mulzer Crushed Stone, Inc. (Cape Sandy Facility) / 025-29526-00002

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

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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

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

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

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Mulzer Crushed Stone, Inc.
(Cape Sandy Facility)
19925 S. Alton Fredonia 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.: T025-29526-00002	
Issued by:  Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 9, 2011 Expiration Date: December 9, 2016

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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)]

The Permittee owns and operates a stationary limestone crushing and processing source consisting of five (5) stationary plants.

Source Address:	19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
General Source Phone Number:	812-547-1400
SIC Code:	1422
County Location:	Crawford
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (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 Elevens Plant 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.

These five (5) plants are located on one or more contiguous properties, have the same two digit SIC code and are still under common ownership; therefore, they are considered one (1) major source, as defined by 326 IAC 2-7-1(22).

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

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

Stationary Plant 1 - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1 are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (a) One (1) primary crusher, identified as MI0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (b) One (1) secondary crusher, identified as MI0102, installed in 1986, capacity: 750 tons of limestone per hour;
- (c) Two (2) tertiary crushers, identified as MI0104 and MI0106, installed in 1962 and 1987 (MI0104 was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each;
- (d) Three (3) conveyors, identified as MJ0101, MJ0103, MJ0105, installed in 1986, capacity: 1,500 tons of limestone per hour, each;
- (e) Nine (9) conveyors, identified as MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127, installed in 1986, capacity: 1,200 tons of limestone per hour, each;
- (f) Fourteen (14) conveyors, identified as MJ0102, MJ0104, MJ0108, MJ0112 through MJ0116, MJ0121, MJ0123 through MJ0126, and MJ0128, installed in 1986, capacity: 1,000 tons of limestone per hour each;
- (g) One (1) truck loading and unloading operation, identified as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour, including one (1) bin installed in 1996, capacity: 150 tons of limestone;
- (h) One (1) primary screen, identified as MK0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (i) One (1) secondary screen, identified as MK0102, installed in 1988, capacity: 1,250 tons of limestone per hour;
- (j) Six (6) tertiary screens, identified as MK0103, MK0105 through MK0107, MK0114 and MK0115, installed in 1986, capacity: 820 tons of limestone per hour, each;
- (k) One (1) final screen, identified as MK0108, installed in 1986, capacity: 770 tons of limestone per hour;
- (l) One (1) rock wash operation, identified as Wash Loadout Plant, consisting of dewatering screws, one (1) multideck screen (3 decks), four (4) conveyors, and one (1) feeder identified as MK-0302, each installed in 1988, with a capacity of 1,250 tons of limestone per hour each, except the feeder, which has a capacity of 1200 tons per hour;
- (m) Four (4) feeders as follows:
 - (1) one (1) feeder, identified as MK-0109, installed in October of 1987, with an operating capacity of 1000 tons per hour;
 - (2) one (1) feeder, identified as MK-0116, installed in February of 2011, with an operating capacity of 200 tons per hour;
 - (3) one (1) feeder, identified as MK-0111, installed in October of 1987, with an operating capacity of 400 tons per hour;
 - (4) one (1) feeder, identified as MK-0112, installed in October of 1987, with an operating capacity of 400 tons per hour;

Stationary Plant 1A - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1A are considered existing affected facilities that operate at a

crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983, except for the primary crusher, identified MI0501. Fugitive emissions are controlled by wet suppression.

- (n) One (1) primary crusher, identified as MI0501, installed in 1962, capacity: 800 tons of limestone per hour;
- (o) One (1) secondary crusher, identified as MI0504, installed in 1966 (replaced with equipment in 1992), capacity: 500 tons of limestone per hour;
- (p) One (1) tertiary crusher, identified as MI0503, installed in 1992, capacity: 400 tons of limestone per hour;
- (q) One (1) primary screen, identified as MK0503, installed in 1992, capacity: 800 tons of limestone per hour;
- (r) Two (2) final screens, identified as MK0504 and MK0505, installed in 1992, capacity: 500 tons of limestone per hour total;
- (s) Five (5) conveyors, identified as MJ0501, MJ0502, MJ0505, MJ0507, MJ0512 installed in 1992, capacity: 1,000 tons of limestone per hour, each;
- (t) Five (5) conveyors, identified as MJ0503, MJ0504, MJ0513, MJ0515, MJ0517, installed in 1992, capacity: 800 tons of limestone per hour, each;
- (u) Seven (7) conveyors, identified as MJ0509, MJ0510, MJ0511, MJ0514, MJ0516, MJ0518, MJ0519 installed in 1992, capacity: 500 tons of limestone per hour, each;
- (v) One (1) truck loading and unloading operation, identified as 1A-TU-1, installed in 1992, including two (2) bin loading operations, installed 1996, capacity: 1,200 tons of limestone per hour;
- (w) Three (3) feeders as follows:
 - (1) one (1) feeder, identified as MK-0509, installed in July of 2011, with an operating capacity of 700 tons per hour;
 - (2) one (1) feeder, identified as MK-0502, installed in October of 1992, with an operating capacity of 750 tons per hour;
 - (3) one (1) feeder, identified as MK-0508, installed in October of 1992, with an operating capacity of 400 tons per hour;

Stationary Plant 2 - Fugitive emissions are controlled by wet suppression.

- (x) One (1) primary crusher, identified as AI0207 installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour;
- (y) One (1) secondary crusher, identified as AI0208, installed in 1980, capacity: 900 tons of limestone per hour;
- (z) One (1) tertiary crusher, identified as AI0203, installed in 1980, capacity: 750 tons of limestone per hour;
- (aa) Two (2) quaternary crushers, identified as AI0204 and AI0205, installed in 1980 (AI0204 was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each;

- (bb) Three (3) conveyors, identified as MJ0201, MJ0203, MJ0205, installed in 1980, capacity: 1,500 tons of limestone per hour, each;
- (cc) Six (6) conveyors, identified as MJ0207, MJ0208, MJ0209, MJ0210, MJ0211, MJ0217, installed in 1980, capacity: 1,200 tons of limestone per hour;
- (dd) Eight (8) conveyors, identified as MJ0202, MJ0206, MJ0212, MJ0213, MJ0214, MJ0215, MJ0216, MJ0218, installed in 1980, capacity: 1,000 tons of limestone per hour, each;
- (ee) One (1) primary screen, identified as MK0202, installed in 1980, capacity: 1,050 tons of limestone per hour;
- (ff) One (1) secondary screen, identified as MK0203, installed in 1980, capacity: 1,150 tons of limestone per hour;
- (gg) One (1) tertiary screen, identified as MK0201, installed in 1980, capacity: 1,245 tons of limestone per hour;
- (hh) Five (5) quaternary screens, identified as MK0204 through MK0208, installed in 1980, capacity: 1,195 tons of limestone per hour, each;
- (ii) Two (2) truck loading operations, identified as 2-TL-1 and 2-TL-2, installed in 1980, capacity: 1,200 tons of limestone per hour, each;
- (jj) Four (4) feeders as follows:
 - (1) one (1) feeder, identified as MK-0209, installed in February of 1988, with an operating capacity of 1200 tons per hour;
 - (2) one (1) feeder, identified as MK-0110, installed in October of 1987, with an operating capacity of 150 tons per hour;
 - (3) one (1) feeder, identified as MK-0214, installed in April of 2011, with an operating capacity of 500 tons per hour;
 - (4) one (1) feeder, identified as MK-0215, installed in April of 2011, with an operating capacity of 500 tons per hour;

Eleven's Plant - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Eleven's Plant are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (kk) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998;
- (ll) One (1) feeder, identified as AK1407, installed in 1998, capacity: 390 tons of limestone per hour;
- (mm) One (1) secondary crusher, identified as AI1402, installed in 1998, capacity: 390 tons of limestone per hour;
- (nn) One (1) screen, identified as AK1404, installed in 1998, capacity: 390 tons of limestone per hour;
- (oo) Three (3) stackers, identified as AJ0921, AJ1418, AJ1419, installed in 1998, capacity: 300 tons of limestone per hour each;

- (pp) Four (4) conveyors, identified as AJ1420, AJ1421, AJ1422, AJ1423, installed in 1998, capacity: 390 tons of limestone per hour, each;
- (qq) Seven (7) conveyors, identified as MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, AJ1424, installed in 1998, capacity: 300 tons of limestone per hour, each; and
- (rr) Two (2) feeders as follows:
 - (1) one (1) feeder, identified as AK-1407, installed in June of 1998, with an operating capacity of 300 tons per hour;
 - (2) one (1) feeder, identified as AK-1405, installed in June of 1998, with an operating capacity of 300 tons per hour;

Combustion Units

- (ss) One (1) No. 2 fuel oil-fired intermittent electric generator, identified as Eleven's Plant Generator, AG-1402, approved in 1998 for construction at a capacity of 7.40 million British thermal units per hour (783 KW). Actual capacity of the unit is 910 KW (1,223.79 HP). Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
- (tt) Three (3) diesel generators identified as follows:
 - (1) Plant 2 Generator, company number ZVHH0109, capacity of 325 KW (437.07 HP), manufactured in 1987 and start-up in 2004 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (2) Underground Fan, company number AG-0902, capacity of 725 KW (975 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (3) Emergency Back-up Generator, company number AG-0901, capacity of 455 KW (611.9 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants.

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

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

- (a) Paved and unpaved roads and parking lots with public access [326 IAC 6-4];
- (b) One (1) wet lime aggregate sand classifying plant, known as Sand Plant (SP), and storage pile created in 1993, with a capacity of 300 tons of limestone per hour, consisting of the following units [326 IAC 2-2]:
 - (1) Two (2) feeders, identified as MK0304 and MK0305, installed in 1992, with an operating capacity of 150 tons per hour each;
 - (2) One (1) screen, identified as MK0306, installed in 1992, with an operating capacity of 300 tons per hour; and
 - (3) Five (5) conveyors, identified as MJ0306 through MJ0310, installed in 1992, with an operating capacity of 300 tons per hour each.

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, T025-29526-00002, 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 of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
 - (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

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

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

The Permittee shall implement the PMPs.

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

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

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

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

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

Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

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

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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T025-29526-00002 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, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

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

Request for renewal shall be submitted to:

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

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

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

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

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

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

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

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

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

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

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

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

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

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

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

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

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

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

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

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:
Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

- (a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

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

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

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

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

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

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

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

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
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

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

Stratospheric Ozone Protection

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

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

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Stationary Plant 1 - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1 are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (a) One (1) primary crusher, identified as MI0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (b) One (1) secondary crusher, identified as MI0102, installed in 1986, capacity: 750 tons of limestone per hour;
- (c) Two (2) tertiary crushers, identified as MI0104 and MI0106, installed in 1962 and 1987 (MI0104 was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each;
- (d) Three (3) conveyors, identified as MJ0101, MJ0103, MJ0105, installed in 1986, capacity: 1,500 tons of limestone per hour, each;
- (e) Nine (9) conveyors, identified as MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127, installed in 1986, capacity: 1,200 tons of limestone per hour, each;
- (f) Fourteen (14) conveyors, identified as MJ0102, MJ0104, MJ0108, MJ0112 through MJ0116, MJ0121, MJ0123 through MJ0126, and MJ0128, installed in 1986, capacity: 1,000 tons of limestone per hour each;
- (g) One (1) truck loading and unloading operation, identified as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour, including one (1) bin installed in 1996, capacity: 150 tons of limestone;
- (h) One (1) primary screen, identified as MK0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (i) One (1) secondary screen, identified as MK0102, installed in 1988, capacity: 1,250 tons of limestone per hour;
- (j) Six (6) tertiary screens, identified as MK0103, MK0105 through MK0107, MK0114 and MK0115, installed in 1986, capacity: 820 tons of limestone per hour, each;
- (k) One (1) final screen, identified as MK0108, installed in 1986, capacity: 770 tons of limestone per hour;
- (l) One (1) rock wash operation, identified as Wash Loadout Plant, consisting of dewatering screws, a multideck 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 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units at Stationary Plant 1 shall be based on the process weight rate for each manufacturing process. Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the crushing, screening and conveyance process equipment shall not exceed the pounds per hour limitations provided in the table below. The pound per hour limitations were calculated with the following equations:

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

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

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:

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

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1 Crushers		
MI0101	1,200	79.97
MI0104	250	60.96
MI0106	250	60.96
Plant 1 Conveyors		
MJ0101	1,500	82.95
MJ0103	1,500	82.95
MJ0105	1,500	82.95
MJ0106	1,200	79.97
MJ0107	1,200	79.97
MJ0109	1,200	79.97
MJ0110	1,200	79.97
MJ0111	1,200	79.97
MJ0117	1,200	79.97
MJ0119	1,200	79.97
MJ0122	1,200	79.97
MJ0127	1,200	79.97
MJ0102	1,000	77.59
MJ0104	1,000	77.59
MJ0108	1,000	77.59
MJ0112	1,000	77.59
MJ0113	1,000	77.59
MJ0114	1,000	77.59
MJ0115	1,000	77.59
MJ0116	1,000	77.59
MJ0121	1,000	77.59
MJ0123	1,000	77.59

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1 Conveyors (Continued)		
MJ0124	1,000	77.59
MJ0125	1,000	77.59
MJ0126	1,000	77.59
MJ0128	1,000	77.59
Plant 1 Screens		
MK0101	1,200	79.97
MK0102	1,250	80.51
MK0103	820	75.05
MK0105	820	75.05
MK0106	820	75.05
MK0107	820	75.05
MK0114	820	75.05
MK0115	820	75.05
MK0108	770	74.26
Plant 1 Wash Loadout Plant		
decks)	each deck 1,250	each deck 80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Plant 1 Feeders		
MK0109	1,000	77.59
MK0116	200	58.51
MK0111	400	66.31
MK0112	400	66.31

Pursuant to 326 IAC 6-3-2(e)(3), the allowable particulate emission rate from the nonfugitive emission units in Stationary Plant 1 may exceed the pound per hour limitation calculated by the previous 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.

D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The nonfugitive particulate emissions from Stationary Plant 1 shall be limited to the following pound per ton rates:

Emission Units	PM Emissions (lb/ton)	PM₁₀ / PM_{2.5} Emissions (lb/ton)
Each primary Crusher	0.0002	0.0002
Each secondary Crusher	0.0002	0.0002
Each Tertiary Crusher	0.0012	0.00054
Each Quaternary / Final Crusher	0.003	0.0012
Each primary Screen	0.0022	0.00074
Each secondary Screen	0.0022	0.00074
Each Tertiary Screen	0.0036	0.0022
Each Quaternary / Final Screen	0.0036	0.0022
Each conveyor transfer point	0.00014	0.000046
Feeders	0.003	0.0011

- (b) The moisture content of the limestone processed shall not be less than 0.55%.
- (c) The source-wide crushed stone throughput shall not exceed 9,700,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits combined with the limited potential emissions from the generators, shall limit the nonfugitive PM and PM₁₀ from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.1.4 Particulate Control [326 IAC 2-2]

In order to ensure compliance with Condition D.1.2, the Permittee shall apply an initial application of water or a mixture of water and wetting agent to control the PM, PM₁₀ emissions from the feeders, crushers, screens, and the conveyors at Stationary Plant 1. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with Condition D.1.2. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content of at least 0.55 percent of the process stream by weight or greater. The Permittee shall submit to IDEM, OAQ the method for moisture content analysis for approval.

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 (MI0101, MI0102, MI0104, and MI0106), the screening (MK0101, MK0102, MK0103, MK0105, MK0106, MK0107, MK0114, MK0115, and MK0108), and the conveying (MJ0101, MJ0103, MJ0105, MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127, MJ0102, MJ0104, MJ0108, MJ0112, MJ0113, MJ0114, MJ0115, MJ0116, MJ0121, MJ0123, MJ0124, MJ0125, MJ0126, and MJ0128) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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

- (a) To document the compliance status with Condition D.1.2(a) and (b), the Permittee shall maintain records as needed of the chemical analysis of the metallurgical material.
- (b) To document the compliance status with Condition D.1.2(c), the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (c) To document the compliance status with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the crushing (MI0101, MI0102, MI0104, and MI0106), the screening (MK0101, MK0102, MK0103, MK0105, MK0106, MK0107, MK0114, MK0115, and MK0108), and the conveying (MJ0101, MJ0103, MJ0105, MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127, MJ0102, MJ0104, MJ0108, MJ0112, MJ0113, MJ0114, MJ0115, MJ0116, MJ0121, MJ0123, MJ0124, MJ0125, MJ0126, and MJ0128) operations once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2(c) 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, not later than 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).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Stationary Plant 1A - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1A are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983, except for the primary crusher, identified MI0501. Fugitive emissions are controlled by wet suppression.

- (m) One (1) primary crusher, identified as MI0501, installed in 1962, capacity: 800 tons of limestone per hour;
- (n) One (1) secondary crusher, identified as MI0504, installed in 1966 (replaced with equipment in 1992), capacity: 500 tons of limestone per hour;
- (o) One (1) tertiary crusher, identified as MI0503, installed in 1992, capacity: 400 tons of limestone per hour;
- (p) One (1) primary screen, identified as MK0503, installed in 1992, capacity: 800 tons of limestone per hour;
- (q) Two (2) final screens, identified as MK0504 and MK0505, installed in 1992, capacity: 500 tons of limestone per hour total;
- (r) Five (5) conveyors, identified as MJ0501, MJ0502, MJ0505, MJ0507, MJ0512 installed in 1992, capacity: 1,000 tons of limestone per hour, each;
- (s) Five (5) conveyors, identified as MJ0503, MJ0504, MJ0513, MJ0515, MJ0517, installed in 1992, capacity: 800 tons of limestone per hour, each;
- (t) Seven (7) conveyors, identified as MJ0509, MJ0510, MJ0511, MJ0514, MJ0516, MJ0518, MJ0519 installed in 1992, capacity: 500 tons of limestone per hour, each;
- (u) One (1) truck loading and unloading operation, identified as 1A-TU-1, installed in 1992, including two (2) bin loading operations, 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 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units at Stationary Plant 1A shall be based on the process weight rate for each manufacturing process. Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the crushing, screening and conveyance process equipment shall not exceed the pounds per hour limitations provided in the table below. The pound per hour limitations were calculated with the following equations:

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

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

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:

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

$$P = \text{process weight rate in tons per hour}$$

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1A Crushers		
MI0501	800	74.74
MI0503	400	66.31
Plant 1A Conveyors		
MJ0501	1,000	77.59
MJ0502	1,000	77.59
MJ0505	1,000	77.59
MJ0507	1,000	77.59
MJ0512	1,000	77.59
MJ0503	800	74.74
MJ0504	800	74.74
MJ0513	800	74.74
MJ0515	800	74.74
MJ0517	800	74.74
MJ0509	500	68.96

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1A Conveyors (Continued)		
MJ0510	500	68.96
MJ0511	500	68.96
MJ0514	500	68.96
MJ0516	500	68.96
MJ0518	500	68.96
MJ0519	500	68.96
Plant 1A Screens		
MK0503	800	74.74
MK0504	250	60.96
MK0505	250	60.96
Plant 1A Feeders		
MK0509	700	73.06
MK0502	750	73.93
MK0508	400	66.31

Pursuant to 326 IAC 6-3-2(e)(3), the allowable particulate emission rate from the nonfugitive emission units in Stationary Plant 1A may exceed the pound per hour limitation calculated by the previous 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.

D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The nonfugitive particulate emissions from Stationary Plant 1A shall be limited to the following pound per ton rates:

Emission Units	PM Emissions (lb/ton)	PM ₁₀ / PM _{2.5} Emissions (lb/ton)
Each primary Crusher	0.0002	0.0002
Each secondary Crusher	0.0002	0.0002
Each Tertiary Crusher	0.0012	0.00054
Each Quaternary / Final Crusher	0.003	0.0012
Each primary Screen	0.0022	0.00074
Each secondary Screen	0.0022	0.00074
Each Tertiary Screen	0.0036	0.0022
Each Quaternary / Final Screen	0.0036	0.0022
Each conveyor transfer point	0.00014	0.000046
Feeders	0.003	0.0011

- (b) The moisture content of the limestone processed shall not be less than 0.55%.
- (c) The source-wide crushed stone throughput shall not exceed 9,700,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits combined with the limited potential emissions from the generators, shall limit the nonfugitive PM and PM₁₀ from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.2.4 Particulate Control [326 IAC 2-2]

In order to ensure compliance with Condition D.2.2, the Permittee shall apply an initial application of water or a mixture of water and wetting agent to control the PM, PM₁₀ emissions from the feeders, crushers, screens, and the conveyors at Stationary Plant 1A. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with Condition D.2.2. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content of at least 0.55 percent of the process stream by weight or greater. The Permittee shall submit to IDEM, OAQ the method for moisture content analysis for approval.

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 (MI0501, MI0504, MI0503), the screening (MK0503, MK0504, MK0505), and the conveying (MJ0501, MJ0502, MJ0505, MJ0507, MJ0512, MJ0503, MJ0504, MJ0513, MJ0515, MJ0517, MJ0509, MJ0510, MJ0511, MJ0514, MJ0516, MJ0518, and MJ0519) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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 the compliance status with Condition D.2.2(a) and (b), the Permittee shall maintain records as needed of the chemical analysis of the metallurgical material.
- (b) To document the compliance status with Condition D.2.2(c), the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (c) To document the compliance status with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the crushing (MI0501, MI0504, MI0503), the screening (MK0503, MK0504, MK0505), and the conveying (MJ0501, MJ0502, MJ0505, MJ0507, MJ0512, MJ0503, MJ0504, MJ0513, MJ0515, MJ0517, MJ0509, MJ0510,

MJ0511, MJ0514, MJ0516, MJ0518, and MJ0519) operations once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).

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

D.2.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2(c) 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, not later than 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).

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Stationary Plant 2 - Fugitive emissions are controlled by wet suppression.

- (v) One (1) primary crusher, identified as AI0207 installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour;
- (w) One (1) secondary crusher, identified as AI0208, installed in 1980, capacity: 900 tons of limestone per hour;
- (x) One (1) tertiary crusher, identified as AI0203, installed in 1980, capacity: 750 tons of limestone per hour;
- (y) Two (2) quaternary crushers, identified as AI0204 and AI0205, installed in 1980 (AI0204 was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each;
- (z) Three (3) conveyors, identified as MJ0201, MJ0203, MJ0205, installed in 1980, capacity: 1,500 tons of limestone per hour, each;
- (aa) Six (6) conveyors, identified as MJ0207, MJ0208, MJ0209, MJ0210, MJ0211, MJ0217, installed in 1980, capacity: 1,200 tons of limestone per hour;
- (bb) Eight (8) conveyors, identified as MJ0202, MJ0206, MJ0212, MJ0213, MJ0214, MJ0215, MJ0216, MJ0218, installed in 1980, capacity: 1,000 tons of limestone per hour, each;
- (cc) One (1) primary screen, identified as MK0202, installed in 1980, capacity: 1,050 tons of limestone per hour;
- (dd) One (1) secondary screen, identified as MK0203, installed in 1980, capacity: 1,150 tons of limestone per hour;
- (ee) One (1) tertiary screen, identified as MK0201, installed in 1980, capacity: 1,245 tons of limestone per hour;
- (ff) Five (5) quaternary screens, identified as MK0204 through MK0208, installed in 1980, capacity: 1,195 tons of limestone per hour;
- (gg) Two (2) truck loading operations, identified 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 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the non-fugitive emission units at Stationary Plant 2 shall be based on the process weight rate for each manufacturing process. Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the crushing, screening and conveyance process equipment shall not exceed the pounds per hour limitations provided in the table below. The pound per hour limitations were calculated with the following equations:

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

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

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:

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

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 2 Crushers		
AI0207	1,200	79.97
AI0208	900	76.23
AI0203	750	73.93
AI0204	370	65.41
AI0205	370	65.41
Plant 2 Conveyors		
MJ0201	1,500	82.95
MJ0203	1,500	82.95
MJ0205	1,500	82.95
MJ0207	1,200	79.97
MJ0208	1,200	79.97
MJ0209	1,200	79.97
MJ0210	1,200	79.97
MJ0211	1,200	79.97
MJ0217	1,200	79.97
MJ0202	1,000	77.59
MJ0206	1,000	77.59
MJ0212	1,000	77.59

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 2 Conveyors (Continued)		
MJ0213	1,000	77.59
MJ0214	1,000	77.59
MJ0215	1,000	77.59
MJ0216	1,000	77.59
MJ0218	1,000	77.59
Plant 2 Screens		
MK0202	1,050	78.22
MK0203	1,150	79.41
MK0201	1,245	80.46
MK0204	1,195	79.91
MK0205	1,195	79.91
MK0206	1,195	79.91
MK0207	1,195	79.91
MK0208	1,195	79.91
Plant 2 Feeders		
MK0209	1,200	79.97
MK0214	500	68.96
MK0215	500	68.96

Pursuant to 326 IAC 6-3-2(e)(3), the allowable particulate emission rate from the nonfugitive emission units in Stationary Plant 2 may exceed the pound per hour limitation calculated by the previous 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.

D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The nonfugitive particulate emissions from Stationary Plant 2 shall be limited to the following pound per ton rates:

Emission Units	PM Emissions (lb/ton)	PM ₁₀ / PM _{2.5} Emissions (lb/ton)
Each primary Crusher	0.0002	0.0002
Each secondary Crusher	0.0002	0.0002
Each Tertiary Crusher	0.0012	0.00054
Each Quaternary / Final Crusher	0.003	0.0012
Each primary Screen	0.0022	0.00074
Each secondary Screen	0.0022	0.00074
Each Tertiary Screen	0.0036	0.0022
Each Quaternary / Final Screen	0.0036	0.0022
Each conveyor transfer point	0.00014	0.000046
Feeders	0.003	0.0011

- (b) The moisture content of the limestone processed shall not be less than 0.55%.

- (c) The source-wide crushed stone throughput shall not exceed 9,700,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits combined with the limited potential emissions from the generators, shall limit the nonfugitive PM and PM₁₀ from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.3.4 Particulate Control [326 IAC 2-2]

In order to ensure compliance with Condition D.3.2, the Permittee shall apply an initial application of water or a mixture of water and wetting agent to control the PM, PM₁₀ emissions from the feeders, crushers, screens, and the conveyors at Stationary Plant 2. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with Condition D.3.2. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content of at least 0.55 percent of the process stream by weight or greater. The Permittee shall submit to IDEM, OAQ the method for moisture content analysis for approval.

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

D.3.5 Visible Emissions Notations

- (a) Visible emission notations of the crushing (AI0207, AI0208, AI0203, AI0204, AI02052), the screening (MK0202, MK0203, MK0201, MK0204, MK0205, MK0206, MK0207, and MK0208), and the conveying (MJ0201, MJ0203, MJ0205, MJ0207, MJ0208, MJ0209, MJ0210, MJ0211, MJ0217, MJ0202, MJ0206, MJ0212, MJ0213, MJ0214, MJ0215, MJ0216, and MJ0218) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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.3.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.2(a) and (b), the Permittee shall maintain records as needed of the chemical analysis of the metallurgical material.
- (b) To document the compliance status with Condition D.3.2(c), the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (c) To document the compliance status with Condition D.3.5, the Permittee shall maintain records of visible emission notations of crushing (AI0207, AI0208, AI0203, AI0204, AI02052), the screening (MK0202, MK0203, MK0201, MK0204, MK0205, MK0206, MK0207, and MK0208), and the conveying (MJ0201, MJ0203, MJ0205, MJ0207, MJ0208, MJ0209, MJ0210, MJ0211, MJ0217, MJ0202, MJ0206, MJ0212, MJ0213, MJ0214, MJ0215, MJ0216, and MJ0218) operations once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.3.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.2(c) 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, not later than 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).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Eleven's Plant - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Eleven's Plant are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (hh) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998;
- (ii) One (1) feeder, identified as AK1407, installed in 1998, capacity: 390 tons of limestone per hour;
- (jj) One (1) secondary crusher, identified as AI1402, installed in 1998, capacity: 390 tons of limestone per hour;
- (kk) One (1) screen, identified as AK1404, installed in 1998, capacity: 390 tons of limestone per hour;
- (ll) Three (3) stackers, identified as AJ0921, AJ1418, AJ1419, installed in 1998, capacity: 300 tons of limestone per hour each;
- (mm) Four (4) conveyors, identified as AJ1420, AJ1421, AJ1422, AJ1423, installed in 1998, capacity: 390 tons of limestone per hour, each;
- (nn) Seven (7) conveyors, identified as MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, AJ1424, installed in 1998, capacity: 300 tons of limestone per hour, each; and

(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 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units at Eleven's Plant shall be based on the process weight rate for each manufacturing process. Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the crushing, screening and conveyance process equipment shall not exceed the pounds per hour limitations provided in the table below. The pound per hour limitations were calculated with the following equations:

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

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

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:

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

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Eleven's Plant Screen		
AK1404	390	66.02
Eleven's Plant Conveyors		
AJ0921	300	63.00
AJ1418	300	63.00
AJ1419	300	63.00
AJ1420	390	66.02
AJ1421	390	66.02
AJ1422	390	66.02
AJ1423	390	66.02

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Eleven's Plant Conveyors (Continued)		
MJ0128	300	63.00
AJ0943	300	63.00
AJ0945	300	63.00
AJ0946	300	63.00
AJ1409	300	63.00
AJ1411	300	63.00
AJ1424	300	63.00
Eleven's Plant Feeders		
AK1407	300	63.00
AK1405	300	63.00

Pursuant to 326 IAC 6-3-2(e)(3), the allowable particulate emission rate from the nonfugitive emission units in Eleven's Plant may exceed the pound per hour limitation calculated by the previous 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.

D.4.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The nonfugitive particulate emissions from Eleven's Plant shall be limited to the following pound per ton rates:

Emission Units	PM Emissions (lb/ton)	PM ₁₀ / PM _{2.5} Emissions (lb/ton)
Each primary Crusher	0.0002	0.0002
Each secondary Crusher	0.0002	0.0002
Each Tertiary Crusher	0.0012	0.00054
Each Quaternary / Final Crusher	0.003	0.0012
Each primary Screen	0.0022	0.00074
Each secondary Screen	0.0022	0.00074
Each Tertiary Screen	0.0036	0.0022
Each Quaternary / Final Screen	0.0036	0.0022
Each conveyor transfer point	0.00014	0.000046
Feeders	0.003	0.0011

- (b) The moisture content of the limestone processed shall not be less than 0.55%.
- (c) The source-wide crushed stone throughput shall not exceed 9,700,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits combined with the limited potential emissions from the generators, shall limit the nonfugitive PM and PM₁₀ from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.4.4 Particulate Control [326 IAC 2-2]

In order to ensure compliance with Condition D.4.2, the Permittee shall apply an initial application of water or a mixture of water and wetting agent to control the PM, PM₁₀ emissions from the feeders, crushers, screens, and the conveyors at Eleven's Plant. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with Condition D.4.2. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content of at least 0.55 percent of the process stream by weight or greater. The Permittee shall submit to IDEM, OAQ the method for moisture content analysis for approval.

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

D.4.5 Visible Emissions Notations

- (a) Visible emission notations of the crushing (AI 1402), the screening (AK 1404), and the conveying (AJ1418, AJ1419, AJ1420, AJ1421, AJ1422, AJ1423, MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, and AJ1424) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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

- (a) To document the compliance status with Condition D.4.2(a) and (b), the Permittee shall maintain records as needed of the chemical analysis of the metallurgical material.
- (b) To document the compliance status with Condition D.4.2(c), the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (c) To document the compliance status 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 (AJ1418, AJ1419, AJ1420, AJ1421, AJ1422, AJ1423, MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, and AJ1424) operations once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.4.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2(c) 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, not later than 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).

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

(f) One (1) wet lime aggregate sand classifying plant, known as Sand Plant (SP), and storage pile created in 1993, with a capacity of 300 tons of limestone per hour, consisting of the following units [326 IAC 2-2]:

- (1) Two (2) feeders, identified as MK0304 and MK0305, installed in 1992, with an operating capacity of 150 tons per hour each;
- (2) One (1) screen, identified as MK0306, installed in 1992, with an operating capacity of 300 tons per hour; and
- (3) Five (5) conveyors, identified as MJ0306 through MJ0310, installed in 1992, with an operating capacity of 300 tons 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.5.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2(e), (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the nonfugitive emission units at Sand Plant shall be based on the process weight rate for each manufacturing process. Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the crushing, screening and conveyance process equipment shall not exceed the pounds per hour limitations provided in the table below. The pound per hour limitations were calculated with the following equations:

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

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

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:

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

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Sand Plant Screen		
MK0306	300	63.00
Sand Plant Conveyors		
MJ0306	300	63.00
MJ0307	300	63.00
MJ0308	300	63.00
MJ0309	300	63.00
MJ0310	300	63.00

Pursuant to 326 IAC 6-3-2(e)(3), the allowable particulate emission rate from the nonfugitive emission units in Sand Plant may exceed the pound per hour limitation calculated by the previous 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.

D.5.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The nonfugitive particulate emissions from Sand Plant shall be limited to the following pound per ton rates:

Emission Units	PM Emissions (lb/ton)	PM₁₀ / PM_{2.5} Emissions (lb/ton)
Each primary Crusher	0.0002	0.0002
Each secondary Crusher	0.0002	0.0002
Each Tertiary Crusher	0.0012	0.00054
Each Quaternary / Final Crusher	0.003	0.0012
Each primary Screen	0.0022	0.00074
Each secondary Screen	0.0022	0.00074
Each Tertiary Screen	0.0036	0.0022
Each Quaternary / Final Screen	0.0036	0.0022
Each conveyor transfer point	0.00014	0.000046
Feeders	0.003	0.0011

- (b) The moisture content of the limestone processed shall not be less than 0.55%.
- (c) The source-wide crushed stone throughput shall not exceed 9,700,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits combined with the limited potential emissions from the generators, shall limit the nonfugitive PM and PM₁₀ from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.5.4 Particulate Control [326 IAC 2-2]

In order to ensure compliance with Condition D.5.2, the Permittee shall apply an initial application of water or a mixture of water and wetting agent to control the PM, PM₁₀ emissions from the feeders, crushers, screens, and the conveyors at Sand Plant. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with Condition D.5.2. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content of at least 0.55 percent of the process stream by weight or greater. The Permittee shall submit to IDEM, OAQ the method for moisture content analysis for approval.

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

D.5.5 Visible Emissions Notations

- (a) Visible emission notations of the feeding (MK0304 and MK0305), the screening (MK 0306), and the conveying (MJ0306 through MJ0310) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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.5.6 Record Keeping Requirements

- (a) To document the compliance status with Condition D.5.2(a) and (b), the Permittee shall maintain records as needed of the chemical analysis of the metallurgical material.
- (b) To document the compliance status with Condition D.5.2(c), the Permittee shall maintain monthly records of the source-wide crushed stone throughput.
- (c) To document the compliance status with Condition D.5.5, the Permittee shall maintain records of visible emission notations the the feeding (MK0304 and MK0305), the screening (MK 0306), and the conveying (MJ0306 through MJ0310) operations once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.5.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.2(c) 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, not later than 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).

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (ss) One (1) No. 2 fuel oil-fired intermittent electric generator, identified as Eleven's Plant Generator, AG-1402, approved in 1998 for construction at a capacity of 7.40 million British thermal units per hour (783 KW). Actual capacity of the unit is 910 KW (1,223.79 HP). Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
- (tt) Three (3) diesel generators identified as follows:
- (1) Plant 2 Generator, company number ZVHH0109, capacity of 325 KW (437.07 HP), manufactured in 1987 and start-up in 2004 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (2) Underground Fan, company number AG-0902, capacity of 725 KW (975 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (3) Emergency Back-up Generator, company number AG-0901, capacity of 455 KW (611.9 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants.

(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.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the diesel generators at this source shall be limited as follows:

- (a) The diesel generators identified as Eleven's Plant Generator, AG-1402; Plant 2 Generator, company number ZVHH0109; and Underground Fan, company number AG-0902; shall be limited to 7,400 hours of operation each per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The diesel generator identified as Emergency Back-up Generator, company number AG-0901, shall be limited to 500 hours of operation each per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) NO_x emissions from the Plant 2 Generator, company number ZVHH0109, shall not exceed three hundredths (0.03) lb/hp-hr NO_x.
- (d) NO_x emissions from the Eleven's Plant Generator, AG-1402, the Underground Fan, company number AG-0902, and the Emergency Back-up Generator, company number AG-0901, shall each not exceed two hundredths (0.02) lb/hp-hr NO_x.

Compliance with these limits will limit total source-wide NO_x emissions to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable for NO_x.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

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

D.6.3 Record Keeping Requirements

- (a) To document the compliance status with Condition D.6.1(a), the Permittee shall maintain monthly records of the hours of operation for the diesel generators identified as Eleven's Plant Generator, AG-1402; Plant 2 Generator, company number ZVHH0109; and Underground Fan, company number AG-0902.
- (b) To document the compliance status with Condition D.6.1(b), the Permittee shall maintain monthly records of the hours of operation for the diesel generator identified as Emergency Back-up Generator, company number AG-0901.
- (c) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.6.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1(a) and (b) 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, not later than 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).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Stationary Plants 1, 1A, and the Eleven's Plant

Stationary Plant 1 - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1 are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (a) One (1) primary crusher, identified as MI0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (b) One (1) secondary crusher, identified as MI0102, installed in 1986, capacity: 750 tons of limestone per hour;
- (c) Two (2) tertiary crushers, identified as MI0104 and MI0106, installed in 1962 and 1987 (MI0104 was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each;
- (d) Three (3) conveyors, identified as MJ0101, MJ0103, MJ0105, installed in 1986, capacity: 1,500 tons of limestone per hour, each;
- (e) Nine (9) conveyors, identified as MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127, installed in 1986, capacity: 1,200 tons of limestone per hour, each;
- (f) Fourteen (14) conveyors, identified as MJ0102, MJ0104, MJ0108, MJ0112 through MJ0116, MJ0121, MJ0123 through MJ0126, and MJ0128, installed in 1986, capacity: 1,000 tons of limestone per hour each;
- (g) One (1) truck loading and unloading operation, identified as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour, including one (1) bin installed in 1996, capacity: 150 tons of limestone;
- (h) One (1) primary screen, identified as MK0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (i) One (1) secondary screen, identified as MK0102, installed in 1988, capacity: 1,250 tons of limestone per hour;
- (j) Six (6) tertiary screens, identified as MK0103, MK0105 through MK0107, MK0114 and MK0115, installed in 1986, capacity: 820 tons of limestone per hour, each;
- (k) One (1) final screen, identified as MK0108, installed in 1986, capacity: 770 tons of limestone per hour;
- (l) One (1) rock wash operation, identified as Wash Loadout Plant, consisting of dewatering screws, a multideck screen and four (4) conveyors, installed in 1988, capacity: 1,250 tons of limestone per hour;

Stationary Plant 1A - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1A are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983, except for the primary crusher, identified MI0501. Fugitive emissions are controlled by wet suppression.

- (n) One (1) secondary crusher, identified as MI0504, installed in 1966 (replaced with equipment in 1992), capacity: 500 tons of limestone per hour;
- (o) One (1) tertiary crusher, identified as MI0503, installed in 1992, capacity: 400 tons of limestone per hour;
- (p) One (1) primary screen, identified as MK0503, installed in 1992, capacity: 800 tons of limestone per hour;
- (q) Two (2) final screens, identified as MK0504 and MK0505, installed in 1992, capacity: 500 tons of limestone per hour total;
- (r) Five (5) conveyors, identified as MJ0501, MJ0502, MJ0505, MJ0507, MJ0512 installed in 1992, capacity: 1,000 tons of limestone per hour, each;
- (s) Five (5) conveyors, identified as MJ0503, MJ0504, MJ0513, MJ0515, MJ0517, installed in 1992, capacity: 800 tons of limestone per hour, each;
- (t) Seven (7) conveyors, identified as MJ0509, MJ0510, MJ0511, MJ0514, MJ0516, MJ0518, MJ0519 installed in 1992, capacity: 500 tons of limestone per hour, each;
- (u) One (1) truck loading and unloading operation, identified as 1A-TU-1, installed in 1992, including two (2) bin loading operations, installed 1996, capacity: 1,200 tons of limestone per hour;

Eleven's Plant - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Eleven's Plant are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (hh) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998;
- (ii) One (1) feeder, identified as AK1407, installed in 1998, capacity: 390 tons of limestone per hour;
- (jj) One (1) secondary crusher, identified as AI1402, installed in 1998, capacity: 390 tons of limestone per hour;
- (kk) One (1) screen, identified as AK1404, installed in 1998, capacity: 390 tons of limestone per hour;
- (ll) Three (3) stackers, identified as AJ0921, AJ1418, AJ1419, installed in 1998, capacity: 300 tons of limestone per hour each;
- (mm) Four (4) conveyors, identified as AJ1420, AJ1421, AJ1422, AJ1423, installed in 1998, capacity: 390 tons of limestone per hour, each;
- (nn) Seven (7) conveyors, identified as MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, AJ1424, installed in 1998, capacity: 300 tons of limestone per hour, each; and

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

New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants [40 CFR 60, Subpart OOO] [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NSPS [40 CFR 60, Subpart A][326 IAC 12-1]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart OOO.

- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 New Source Performance Standard for Mineral Processing Plants [40 CFR 60, Subpart OOO][326 IAC 12]

The Permittee, which owns or operates crushed stone plants with capacities greater than 136 megagrams (150 tons) per hour shall comply with the following provisions of 40 CFR Part 60, Subpart OOO, which are incorporated by reference as 326 IAC 12:

- (1) 40 CFR 60.670
- (2) 40 CFR 60.671
- (3) 40 CFR 60.672(b),(d)
- (4) 40 CFR 60.673
- (5) 40 CFR 60.675(a),(c)(1)&(3), (e)(1)&(2)
- (6) 40 CFR 60.676 (a),(f),(g),(h),(i)(1),(j),(k)
- (7) Table 1
- (8) Table 3

The entire text of 40 CFR 60, Subpart OOO is included as Attachment A of this permit.

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: -Combustion Units

- (ss) One (1) No. 2 fuel oil-fired intermittent electric generator, identified as Eleven's Plant Generator, AG-1402, approved in 1998 for construction at a capacity of 7.40 million British thermal units per hour (783 KW). Actual capacity of the unit is 910 KW (1,223.79 HP). Under 40 CRF 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
- (tt) Three (3) diesel generators identified as follows:
- (1) Plant 2 Generator, company number ZVHH0109, capacity of 325 KW (437.07 HP), manufactured in 1987 and start-up in 2004 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (2) Underground Fan, company number AG-0902, capacity of 725 KW (975 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (3) Emergency Back-up Generator, company number AG-0901, capacity of 455 KW (611.9 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ] [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.800, The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the stationary reciprocating internal combustion engines identified as Plant 2 Generator (company number ZVHH0109), Underground Fan (company number AG-0902), Eleven's Plant Generator (company number AG-1402), and Emergency Back-up Generator (company number AG-0901) as specified in as specified in 40 CFR Part 63, Subpart ZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZ.

E.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Compression Ignition Internal Combustion Engines [40 CFR 63, Subpart ZZZZ][326 IAC 20-1]

The Permittee, which owns or operates stationary Reciprocating Internal Combustion Engines shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ, which are incorporated by reference as 326 IAC 20:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(1)(iii)
- (4) 40 CFR 63.6595(a)(6),(c)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6604
- (7) 40 CFR 63.6605

- (8) 40 CFR 63.6612
- (9) 40 CFR 63.6615
- (10) 40 CFR 63.6620
- (11) 40 CFR 63.6625
- (12) 40 CFR 63.6630
- (13) 40 CFR 63.6635
- (14) 40 CFR 63.6640(a),(b)
- (15) 40 CFR 63.6645
- (16) 40 CFR 63.6650
- (17) 40 CFR 63.6655
- (18) 40 CFR 63.6660
- (19) 40 CFR 63.6665
- (20) 40 CFR 63.6670
- (21) 40 CFR 63.6675
- (22) Tables 1-8 (applicable portions)

The entire text of 40 CFR 63, Subpart ZZZZ is included as Attachment B of this permit.

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

Source Name: Mulzer Crushed Stone, Inc.
Source Address: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
Part 70 Permit No.: T025-29526-00002

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 AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Mulzer Crushed Stone, Inc.
Source Address: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
Part 70 Permit No.: T025-29526-00002

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) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.
--

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Mulzer Crush Stone, Inc. (Cape Sandy Facility)
Source Address: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
Part 70 Permit No.: T025-29526-00002
Facilities: Entire Source (Plants 1, 1A, 2 Eleven's, and Sand) - Nonfugitive Emission Units
(Feeding, Crushing, Screening and Conveying Operations)
Parameter: Crushed stone throughput
Limit: 9,700,500 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: _____

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

Part 70 Quarterly Report

Source Name: Mulzer Crush Stone, Inc. (Cape Sandy Facility)
Source Address: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
Part 70 Permit No.: T025-29526-00002
Facilities: Diesel generators identified as Eleven's Plant Generator, AG-1402; Plant 2 Generator, company number ZVHH0109; and Underground Fan, company number AG-0902
Parameter: Hours of Operation
Limit: 7,400 hours of operation each per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Hours of Operation	Hours of Operation	Hours of Operation
	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: _____

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

Part 70 Quarterly Report

Source Name: Mulzer Crush Stone, Inc. (Cape Sandy Facility)
Source Address: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
Part 70 Permit No.: T025-29526-00002
Facilities: Diesel generator identified as Emergency Back-up Generator, company number AG-0901
Parameter: Hours of Operation
Limit: 500 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Hours of Operation	Hours of Operation	Hours of Operation
	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: _____

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

Source Name: Mulzer Crushed Stone, Inc.
Source Address: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
Part 70 Permit No.: T025-29526-00002

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

Page 1 of 2

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

**Attachment A
to a
Part 70 Operating Permit**

Source Background and Description

Source Name:	Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Source Location:	19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County:	Crawford
SIC Code:	1422
Permit Renewal No.:	T025-29526-00002
Permit Reviewer:	APT

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 74 FR 19309, Apr. 28, 2009, unless otherwise noted.

§ 60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).

(b) An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.

§ 60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more affected facilities to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crush or Crushing means to reduce the size of nonmetallic mineral material by means of physical impaction of the crusher or grinding mill upon the material.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: Jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: Hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

(1) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(2) Sand and Gravel.

(3) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(4) Rock Salt.

(5) Gypsum (natural or synthetic).

(6) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(7) Pumice.

(8) Gilsonite.

(9) Talc and Pyrophyllite.

(10) Boron, including Borax, Kernite, and Colemanite.

(11) Barite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

(15) Perlite.

(16) Vermiculite.

(17) Mica.

(18) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor,

slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Saturated material means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be "saturated" for purposes of this definition.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

Seasonal shut down means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) of nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: Trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet material processing operation(s) means any of the following:

(1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or

(2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

§ 60.672 Standard for particulate matter (PM).

(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

(b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

(c) [Reserved]

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and

(2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.

(f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

§ 60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

(a) The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).

(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:

(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and

(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.

(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

(d) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g. , using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

(e) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of Table 6 to Subpart AAAAA of 40 CFR part 63.

§ 60.675 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A-1 through A-7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:

(1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A-3 of this part or Method 17 of Appendix A-6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 of Appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of this part and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9 (40 CFR part 60, Appendix A-4), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations shall be 1 hour (ten 6-minute averages).

(ii) The duration of the Method 9 (40 CFR part 60, Appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.

(d) To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.

(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11.

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

(4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A-1 of this part [*i.e.*, velocity head <1.3 mm H₂O (0.05 in. H₂O)] and referred to in EPA Method 5 of Appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (*e.g.*, from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_f}{A_e} \quad (\text{Eq. 1})$$

Where:

V_e = average building vent velocity (feet per minute);

Q_f = average fan flow rate (cubic feet per minute); and

A_e = area of building vent and measurement location (square feet).

(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.

(g) For performance tests involving only Method 9 (40 CFR part 60 Appendix A–4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.

(h) [Reserved]

(i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

§ 60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(b)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

(2) For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.

- (i) Records of the bag leak detection system output;
 - (ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and
 - (iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.
- (3) The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.
- (c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.
 - (d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.
 - (e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.
 - (f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).
 - (g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.
 - (h) The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.
 - (i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.
- (1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.
- (2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.
- (j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.
 - (k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).

Table 1 to Subpart 000—Exceptions to Applicability of Subpart A to Subpart 000

Table 1 to Subpart 000—Exceptions to Applicability of Subpart A to Subpart 000

Subpart A reference	Applies to subpart 000	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

Table 2 to Subpart 000—Stack Emission Limits for Affected Facilities With Capture Systems

Table 2 to Subpart 000—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) ^a	7 percent for dry control devices ^b	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a)

			and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ^a	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

^aExceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

^bThe stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

Table 3 to Subpart OOO—Fugitive Emission Limits

Table 3 to Subpart OOO—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.

<p>60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008</p>			
<p>Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008</p>	<p>7 percent opacity</p>	<p>12 percent opacity</p>	<p>An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and</p>
			<p>A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.</p>

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

**Attachment B
to a
Part 70 Operating Permit**

Source Background and Description

Source Name:	Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Source Location:	19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County:	Crawford
SIC Code:	1422
Permit Renewal No.:	T025-29526-00002
Permit Reviewer:	APT

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE.

(i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) Stationary RICE subject to limited requirements.

(1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(h) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source of HAP emissions; an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE; an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE; an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing spark ignition emergency or limited use stationary RICE; an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; or an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010]

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected sources.*

(1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010]

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an

existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6601 What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[75 FR 9675, Mar. 3, 2010]

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary CI RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010]

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing non-emergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the

requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 9675, Mar. 3, 2010]

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010]

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.
- (5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008]

§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing CI stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary CI RICE located at an area source of HAP emissions you are subject to the requirements of this section.

- (a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).
- (b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
- (2) The test must not be older than 2 years.
- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010]

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

- (a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.
- (b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.
- (c) [Reserved]
- (d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

C_i= concentration of CO or formaldehyde at the control device inlet,

C_o= concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/10⁶ Btu).

F_c= Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/10⁶ Btu).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

X_{CO2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ - 15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the NO_x and SO₂ gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

%CO₂ = Measured CO₂ concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

- (3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;
- (4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;
- (5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;
- (6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
- (7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.
- (i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) in this section.

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

(h) If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary engine that is subject to the work, operation or management practices in items 1, 2, or 4 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(2) There is no time limit on the use of emergency stationary RICE in emergency situations.

(3) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(4) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary CI RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

- (5) This requirement does not apply if you own or operate an existing stationary CI RICE less than 100 HP, an existing stationary emergency CI RICE, or an existing stationary CI RICE that is not subject to any numerical emission standards.
- (b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.
- (c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.
- (d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.
- (e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.
- (f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
- (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
- (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
- (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6650 What reports must I submit and when?

- (a) You must submit each report in Table 7 of this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
- (1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

- (2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.
 - (3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - (4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
 - (5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.
 - (6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.
 - (7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.
 - (8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
 - (9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
- (c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.
- (1) Company name and address.
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (3) Date of report and beginning and ending dates of the reporting period.
 - (4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.
 - (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
 - (6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

- (1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.
- (2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.
- (3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary CI RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency CI RICE.

(3) An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(1) An existing emergency stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

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

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

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

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§ 63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO₂.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in §63.6640(f).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO₂, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.*, remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C₃H₈.

Residential/commercial/institutional emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or residences, commercial establishments such as office buildings, hotels, or stores, or institutional establishments such as medical centers, research centers, and institutions of higher education.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂	

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010]

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

[As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating
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	limitation...
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and using NSCR.	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and not using NSCR.	

[73 FR 3607, Jan. 18, 2008]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O ₂ . If you commenced construction or reconstruction between December 19, 2002	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the

	and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O ₂ until June 15, 2007	non-startup emission limitations apply. ¹
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O ₂	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O ₂	

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, Existing Non-Emergency Compression Ignition Stationary RICE >500 HP, and New and Reconstructed 4SLB Burn Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and existing, new and reconstructed compression ignition stationary RICE:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. ¹

<p>2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst</p>	<p>Comply with any operating limitations approved by the Administrator.</p>
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¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 9680, Mar. 3, 2010]

Table 2cto Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary Rice Located at Major Sources of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency CI and black start CI. ¹	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ² b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³
2. Non-Emergency, non-black start CI < 100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ²	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	

	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	
3. Non-Emergency, non-black start CI RICE $100 \leq \text{HP} \leq 300$ HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O ₂ .	
4. Non-Emergency, non-black start CI $300 < \text{HP} \leq 500$	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start CI > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	

¹If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

²Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

³Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9681, Mar. 3, 2010]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of	During periods of startup you must . . .
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	startup . . .	
1. Non-Emergency, non-black start CI \leq 300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ¹	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	
2. Non-Emergency, non-black start CI $300 < \text{HP} \leq 500$	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more	
3. Non-Emergency, non-black start CI $>$ 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more	
4. Emergency CI and black start CI. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR 9681, Mar. 3, 2010]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. ¹
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. ¹
3. Stationary RICE with a brake horsepower >500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. ¹
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE		Conduct subsequent performance tests every 8,760 hrs or 5 years, whichever comes first.

¹After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 9682, Mar. 3, 2010]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE for existing sources:

For each . ..	Complying with the requirement to ...	You must ...	Using ...	According to the following requirements ...
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O ₂ at the inlet and outlet of the control device; and	(1) Portable CO and O ₂ analyzer.	(a) Using ASTM D6522–00 (2005) ^a (incorporated by reference, <i>see</i> §63.14). Measurements to determine O ₂ must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O ₂ analyzer.	(a) Using ASTM D6522–00 (2005) ^{a,b} (incorporated by reference, <i>see</i> §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O ₂ , dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O ₂ concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

		iv. Measure formaldehyde at the inlet and the outlet of the control device.	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03 ^c , provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03 ^c , provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

			be greater than or equal to 70 and less than or equal to 130	
		v. Measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005) ^a , Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

^aYou may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

^bYou may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

^cYou may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 9682, Mar. 3, 2010]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial

		performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O ₂ or CO ₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the

		requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to

		continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 9684, Mar. 3, 2010]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ^a ; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and

		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ^a ; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake HP $\geq 5,000$ located at a major source	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved. ^a
7. Stationary RICE >500 HP located at a major source	Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit ^a ; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and

		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE >500 HP located at a major source	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit ^a ; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing stationary CI RICE not subject to any numerical emission limitations	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
		ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary RICE >500 HP that are not limited use stationary RICE, except 4SRB >500 HP located at major sources	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE	a. Reduce CO or formaldehyde emissions; or b. Limit the	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or

	concentration of formaldehyde or CO in the stationary RICE exhaust	formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
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^aAfter you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 9685, Mar. 3, 2010]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary CI RICE subject to numerical emission limitations.
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
	c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that	i. Annually, according to the requirements in §63.6650.

	the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	
	b. The operating limits provided in your Federally enforceable permit, and any deviations from these limits; and	i. <i>See</i> item 2.a.i.
	c. Any problems or errors suspected with the meters	i. <i>See</i> item 2.a.i.

[75 FR 9687, Mar. 3, 2010]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing	Yes.	

	sources		
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	

§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§63.8(c)(2)–(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous

			Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)–(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in

			§63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	

§63.10(b)(1)	Record retention	Yes.	
§63.10(b)(2)(i)–(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)–(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i)(C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	

§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Indiana Department of Environmental Management Office of Air Quality

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

Source Background and Description

Source Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Source Location: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Permit Reviewer: APT

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 consisting of five (5) stationary plants. On August 4, 2010, Mulzer Crushed Stone, Inc. submitted an application to the OAQ requesting to renew its operating permit. Mulzer Crushed Stone, Inc. was issued its first Part 70 Operating Permit Renewal (T025-18843-00002) on May 3, 2006.

Source Definition

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

This stationary limestone crushing and processing company consists of five (5) plants all located at 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137:

- (a) Stationary Plant 1;
- (b) Stationary Plant 1A;
- (c) Stationary Plant 2;
- (d) Stationary Eleven's Plant; and
- (e) Stationary Sand Plant.

These five (5) plants are located on one or more contiguous properties, have the same two digit SIC code and are still under common ownership; therefore, they are considered one (1) major source, as defined by 326 IAC 2-7-1(22).

Permitted Emission Units and Pollution Control Equipment

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

Stationary Plant 1 - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1 are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (a) One (1) primary crusher, identified as MI0101, installed in 1986, capacity: 1,200 tons of limestone per hour;

- (b) One (1) secondary crusher, identified as MI0102, installed in 1986, capacity: 750 tons of limestone per hour;
- (c) Two (2) tertiary crushers, identified as MI0104 and MI0106, installed in 1962 and 1987 (MI0104 was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each;
- (d) Three (3) conveyors, identified as MJ0101, MJ0103, MJ0105, installed in 1986, capacity: 1,500 tons of limestone per hour, each;
- (e) Nine (9) conveyors, identified as MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127, installed in 1986, capacity: 1,200 tons of limestone per hour, each;
- (f) Fourteen (14) conveyors, identified as MJ0102, MJ0104, MJ0108, MJ0112 through MJ0116, MJ0121, MJ0123 through MJ0126, and MJ0128, installed in 1986, capacity: 1,000 tons of limestone per hour each;
- (g) One (1) truck loading and unloading operation, identified as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour, including one (1) bin installed in 1996, capacity: 150 tons of limestone;
- (h) One (1) primary screen, identified as MK0101, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (i) One (1) secondary screen, identified as MK0102, installed in 1988, capacity: 1,250 tons of limestone per hour;
- (j) Six (6) tertiary screens, identified as MK0103, MK0105 through MK0107, MK0114 and MK0115, installed in 1986, capacity: 820 tons of limestone per hour, each;
- (k) One (1) final screen, identified as MK0108, installed in 1986, capacity: 770 tons of limestone per hour;
- (l) One (1) rock wash operation, identified as Wash Loadout Plant, consisting of dewatering screws, one (1) multideck screen (3 decks), four (4) conveyors, and one (1) feeder identified as MK-0302, each installed in 1988, with a capacity of 1,250 tons of limestone per hour each, except the feeder, which has a capacity of 1200 tons per hour;
- (m) Four (4) feeders as follows:
 - (1) one (1) feeder, identified as MK-0109, installed in October of 1987, with an operating capacity of 1000 tons per hour;
 - (2) one (1) feeder, identified as MK-0116, installed in February of 2011, with an operating capacity of 200 tons per hour;
 - (3) one (1) feeder, identified as MK-0111, installed in October of 1987, with an operating capacity of 400 tons per hour;
 - (4) one (1) feeder, identified as MK-0112, installed in October of 1987, with an operating capacity of 400 tons per hour;

Stationary Plant 1A - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1A are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983, except for the primary crusher, identified MI0501. Fugitive emissions are controlled by wet suppression.

- (n) One (1) primary crusher, identified as MI0501, installed in 1962, capacity: 800 tons of limestone per hour;
- (o) One (1) secondary crusher, identified as MI0504, installed in 1966 (replaced with equipment in 1992), capacity: 500 tons of limestone per hour;
- (p) One (1) tertiary crusher, identified as MI0503, installed in 1992, capacity: 400 tons of limestone per hour;
- (q) One (1) primary screen, identified as MK0503, installed in 1992, capacity: 800 tons of limestone per hour;
- (r) Two (2) final screens, identified as MK0504 and MK0505, installed in 1992, capacity: 500 tons of limestone per hour total;
- (s) Five (5) conveyors, identified as MJ0501, MJ0502, MJ0505, MJ0507, MJ0512 installed in 1992, capacity: 1,000 tons of limestone per hour, each;
- (t) Five (5) conveyors, identified as MJ0503, MJ0504, MJ0513, MJ0515, MJ0517, installed in 1992, capacity: 800 tons of limestone per hour, each;
- (u) Seven (7) conveyors, identified as MJ0509, MJ0510, MJ0511, MJ0514, MJ0516, MJ0518, MJ0519 installed in 1992, capacity: 500 tons of limestone per hour, each;
- (v) One (1) truck loading and unloading operation, identified as 1A-TU-1, installed in 1992, including two (2) bin loading operations, installed 1996, capacity: 1,200 tons of limestone per hour;
- (w) Three (3) feeders as follows:
 - (1) one (1) feeder, identified as MK-0509, installed in July of 2011, with an operating capacity of 700 tons per hour;
 - (2) one (1) feeder, identified as MK-0502, installed in October of 1992, with an operating capacity of 750 tons per hour;
 - (3) one (1) feeder, identified as MK-0508, installed in October of 1992, with an operating capacity of 400 tons per hour;

Stationary Plant 2 - Fugitive emissions are controlled by wet suppression.

- (x) One (1) primary crusher, identified as AI0207 installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour;
- (y) One (1) secondary crusher, identified as AI0208, installed in 1980, capacity: 900 tons of limestone per hour;
- (z) One (1) tertiary crusher, identified as AI0203, installed in 1980, capacity: 750 tons of limestone per hour;
- (aa) Two (2) quaternary crushers, identified as AI0204 and AI0205, installed in 1980 (AI0204 was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each;
- (bb) Three (3) conveyors, identified as MJ0201, MJ0203, MJ0205, installed in 1980, capacity: 1,500 tons of limestone per hour, each;

- (cc) Six (6) conveyors, identified as MJ0207, MJ0208, MJ0209, MJ0210, MJ0211, MJ0217, installed in 1980, capacity: 1,200 tons of limestone per hour;
- (dd) Eight (8) conveyors, identified as MJ0202, MJ0206, MJ0212, MJ0213, MJ0214, MJ0215, MJ0216, MJ0218, installed in 1980, capacity: 1,000 tons of limestone per hour, each;
- (ee) One (1) primary screen, identified as MK0202, installed in 1980, capacity: 1,050 tons of limestone per hour;
- (ff) One (1) secondary screen, identified as MK0203, installed in 1980, capacity: 1,150 tons of limestone per hour;
- (gg) One (1) tertiary screen, identified as MK0201, installed in 1980, capacity: 1,245 tons of limestone per hour;
- (hh) Five (5) quaternary screens, identified as MK0204 through MK0208, installed in 1980, capacity: 1,195 tons of limestone per hour, each;
- (ii) Two (2) truck loading operations, identified as 2-TL-1 and 2-TL-2, installed in 1980, capacity: 1,200 tons of limestone per hour, each;
- (jj) Four (4) feeders as follows:
 - (1) one (1) feeder, identified as MK-0209, installed in February of 1988, with an operating capacity of 1200 tons per hour;
 - (2) one (1) feeder, identified as MK-0110, installed in October of 1987, with an operating capacity of 150 tons per hour;
 - (3) one (1) feeder, identified as MK-0214, installed in April of 2011, with an operating capacity of 500 tons per hour;
 - (4) one (1) feeder, identified as MK-0215, installed in April of 2011, with an operating capacity of 500 tons per hour;

Eleven's Plant - Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Eleven's Plant are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.

- (kk) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998;
- (ll) One (1) feeder, identified as AK1407, installed in 1998, capacity: 390 tons of limestone per hour;
- (mm) One (1) secondary crusher, identified as AI1402, installed in 1998, capacity: 390 tons of limestone per hour;
- (nn) One (1) screen, identified as AK1404, installed in 1998, capacity: 390 tons of limestone per hour;
- (oo) Three (3) stackers, identified as AJ0921, AJ1418, AJ1419, installed in 1998, capacity: 300 tons of limestone per hour each;
- (pp) Four (4) conveyors, identified as AJ1420, AJ1421, AJ1422, AJ1423, installed in 1998, capacity: 390 tons of limestone per hour, each;
- (qq) Seven (7) conveyors, identified as MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, AJ1424, installed in 1998, capacity: 300 tons of limestone per hour, each; and

- (rr) Two (2) feeders as follows:
- (1) one (1) feeder, identified as AK-1407, installed in June of 1998, with an operating capacity of 300 tons per hour;
 - (2) one (1) feeder, identified as AK-1405, installed in June of 1998, with an operating capacity of 300 tons per hour;

Combustion Units

- (ss) One (1) No. 2 fuel oil-fired intermittent electric generator, identified as Eleven's Plant Generator, AG-1402, approved in 1998 for construction at a capacity of 7.40 million British thermal units per hour (783 KW). Actual capacity of the unit is 910 KW (1,223.79 HP). Under 40 CRF 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit
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The source also consists of the following emission units that were constructed and/or are operating without a permit:

The source had listed the following insignificant activity in previous approvals:

- (a) Emergency generators as follows: gasoline generators not exceeding 110 horsepower.

The following emission units that exceed the insignificant activity threshold of 110 horsepower have been constructed at the source:

- (tt) Three (3) diesel generators identified as follows:
- (1) Plant 2 Generator, company number ZVHH0109, capacity of 325 KW (437.07 HP), manufactured in 1987 and start-up in 2004 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (2) Underground Fan, company number AG-0902, capacity of 725 KW (975 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;
 - (3) Emergency Back-up Generator, company number AG-0901, capacity of 455 KW (611.9 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants.

The source also consists of the following emission units that were constructed and/or are operating without a permit:

- (a) one (1) feeder, identified as MK-0509, installed in July of 2011, with an operating capacity of 700 tons per hour; and
- (b) one (1) feeder, identified as MK-0116, installed in February of 2011, with an operating capacity of 200 tons per hour.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

- (a) Two (2) quaternary crushers (A & B), identified 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.
- (b) One conveyor, identified as 1-TP-3, installed in 1986, capacity: 1,000 tons of limestone per hour;
- (c) One (1) bin, installed in 1996, capacity: 150 tons of limestone.

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 [326 IAC 6-4];
- (e) Maintenance shop used oil heaters; and
- (f) One (1) wet lime aggregate sand classifying plant, known as Sand Plant (SP), and storage pile created in 1993, with a capacity of 300 tons of limestone per hour, consisting of the following units [326 IAC 2-2]:
 - (1) Two (2) feeders, identified as MK0304 and MK0305, installed in 1992, with an operating capacity of 150 tons per hour each;
 - (2) One (1) screen, identified as MK0306, installed in 1992, with an operating capacity of 300 tons per hour; and
 - (3) Five (5) conveyors, identified as MJ0306 through MJ0310, installed in 1992, with an operating capacity of 300 tons per hour each.

Existing Approvals

Since the issuance of the Part 70 Operating Permit Renewal (T025-18843-00002) on May 3, 2006, the source has not constructed or has not been operating under any additional approvals:

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.

Enforcement Issue

IDEM is aware that equipment has been constructed (and/or operated) prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit".

- (a) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

See Appendix B of this document for detailed process flow diagrams for each plant.

County Attainment Status

The source is located in Crawford County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Crawford County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Crawford County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. This rule became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**
 Crawford County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

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

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀, PM_{2.5}, CO, and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Part 70 Permit Conditions

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

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

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)											
Process / Emission Unit	PM	PM ₁₀	PM _{2.5} **	SO ₂	VOC	CO	NO _x	GHG (CO ₂ e)	Total HAPs	Worst Single HAP	
NON-FUGITIVE EMISSIONS											
Crushing	< 240	< 108	< 108	-----	-----	-----	-----	-----	-----	-----	
Screening				-----	-----	-----	-----	-----	-----	-----	-----
Conveyor Transfer				-----	-----	-----	-----	-----	-----	-----	-----
Feeders				-----	-----	-----	-----	-----	-----	-----	-----
Combustion - Diesel Generators	9.36	9.36	9.36	36.47	9.84	56.39	249.06	11,515.55	0.14	Benzene 0.06	
Total Non-Fugitive PTE of Entire Source	< 250	< 250	< 250	< 100	< 100	< 100	< 250	< 12,000	< 25	< 10	
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10	
PSD Major Source Threshold	250	250	250	250	250	250	250	100,000	NA	NA	
*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM ₁₀), not particulate matter (PM), is considered as a "regulated air pollutant".											
**PM _{2.5} is listed as direct PM _{2.5} .											

- (a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHG, are less than two hundred fifty (<250) tons per year, emissions of GHG are less than one hundred thousand (<100,000) tons of CO₂ equivalent (CO₂e) emissions per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

CAM:

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

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

The requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM), are not applicable to the crushing, screening, and conveying process operations at this source. The wet suppression system that is used at this source to comply with particulate emission limitations pursuant to 326 IAC 2-2 is considered a passive control measure. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this Part 70 Operating Permit Renewal.

NSPS:

- (a) The requirements of the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII, (326 IAC

12), are not included in the permit for the diesel generators. The diesel generators were constructed prior to July 11, 2005, the applicability date of this rule.

- (b) The requirements of the New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ, (326 IAC 12), are not included in the permit for the diesel generators. The diesel generators were constructed prior to June 12, 2006, the applicability date of this rule.
- (c) This source is still subject to the New Source Performance Standard for Nonmetallic Mineral Processing Plants (40 CFR 60.670, Subpart OOO), which is incorporated by reference as 326 IAC 12. 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).
 - (1) The provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants identified as Stationary Plant 1, Stationary Plant 1A, and Stationary Elevens Plant: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Nonapplicable portions of the NSPS will not be included in the permit. This source is subject to the following portions of Subpart OOO:
 - (1) 40 CFR 60.670
 - (2) 40 CFR 60.671
 - (3) 40 CFR 60.672(b),(d)
 - (4) 40 CFR 60.673
 - (5) 40 CFR 60.675(a),(c)(1)&(3), (e)(1)&(2)
 - (6) 40 CFR 60.676 (a),(f),(g),(h),(i)(1),(j),(k)
 - (7) Table 1
 - (8) Table 3
 - (2) The requirements of NSPS Subpart OOO will not be included in this permit for the Stationary Sand Plant. 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, and is considered a wet material processing operation (as defined in §60.671).
 - (3) 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. Construction of all of the crushers, screens, and conveyors at Stationary Plant 2 commenced prior to August 31, 1983. (See (5) - Stationary Plant 2, below for details about primary crusher (AI0207) and quaternary crusher (AI0204)).
 - (4) The requirements of NSPS Subpart OOO will not be included in this permit for the primary crusher, identified MI0501, located at Stationary Plant 1A. Construction of this emission unit commenced prior to August 31, 1983.
 - (5) 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. Pursuant to 40 CFR 60.676(a)(1), the Permittee was required to submit to IDEM, OAQ the following information about units that have been replaced:

Stationary Plant 1

Tertiary crusher (MI0104) constructed in 1962 and replaced with identical equipment in 1987:

- (A) The rated capacity in megagrams or tons per hour of the tertiary crusher, constructed in 1962, and
- (B) The rated capacity in tons per hour of the tertiary crusher, constructed in 1987.

Stationary Plant 1A

Secondary crusher (MI0504) 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.

Stationary Plant 2

Primary crusher (AI0207), constructed in 1966, replaced with identical equipment in 1992, and quaternary crusher (AI0204), 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 tertiary crusher (MI0104), secondary crusher (MI0504), primary crusher (AI0207), and quaternary crusher (AI0204),

NESHAP:

- (a) The diesel generators are subject to the National Emission Standards for Hazardous Air Pollutants 40 CFR 63, Subpart ZZZZ, National Emission Standards for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ) which is incorporated by reference as 326 IAC 20-82. The generators are located at an area source of HAP emissions and construction or reconstruction of each commenced before June 12, 2006. The existing stationary RICE subject to this rule include the following:
 - (1) One (1) No. 2 fuel oil-fired intermittent electric generator, identified as Eleven's Plant Generator, AG-1402, approved in 1998 for construction at a capacity of 7.40 million British thermal units per hour (783 KW). Actual capacity of the unit is 910 KW (1,223.79 HP);
 - (2) Plant 2 Generator, company number ZVHH0109, capacity of 325 KW (437.07 HP), manufactured in 1987 and start-up in 2004 at Cape Sandy;

- (3) Underground Fan, company number AG-0902, capacity of 725 KW (975 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy; and
- (4) Emergency Back-up Generator, company number AG-0901, capacity of 455 KW (611.9 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy.

The diesel generators are subject to the following portions of Subpart ZZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(1)(iii)
- (4) 40 CFR 63.6595(a)(6),(c)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6604
- (7) 40 CFR 63.6605
- (8) 40 CFR 63.6612
- (9) 40 CFR 63.6615
- (10) 40 CFR 63.6620
- (11) 40 CFR 63.6625
- (12) 40 CFR 63.6630
- (13) 40 CFR 63.6635
- (14) 40 CFR 63.6640(a),(b)
- (15) 40 CFR 63.6645
- (16) 40 CFR 63.6650
- (17) 40 CFR 63.6655
- (18) 40 CFR 63.6660
- (19) 40 CFR 63.6665
- (20) 40 CFR 63.6670
- (21) 40 CFR 63.6675
- (22) Tables 1-8 (applicable portions)

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 MI0104 (Plant 1); primary crusher, identified as MI0501 (Plant 1A); and secondary crusher, identified as MI0504 (Plant 1A), were constructed prior to August 7, 1977. Therefore, a PSD permit pursuant to 326 IAC 2-2 was not required for these emission units. However, the source has requested to remain minor under PSD and therefore, must meet the pound per ton limits for all crushers, screens, and conveyors at each plant in order to ensure that the source-wide non-fugitive emissions are less than 250 tons per year.
- (b) The nonfugitive particulate emissions from Stationary Plants 1, 1A, 2, Eleven's Plant and the Sand Plant shall be limited by the following:
 - (1) Each emission unit shall not exceed the following pound per ton limits:

Emission Units	PM Emissions (lb/ton)	PM₁₀ / PM_{2.5} Emissions (lb/ton)
Each primary Crusher	0.0002	0.0002
Each secondary Crusher	0.0002	0.0002
Each Tertiary Crusher	0.0012	0.00054
Each Quaternary / Final Crusher	0.003	0.0012
Each primary Screen	0.0022	0.00074
Each secondary Screen	0.0022	0.00074
Each Tertiary Screen	0.0036	0.0022
Each Quaternary / Final Screen	0.0036	0.0022
Each conveyor transfer point	0.00014	0.000046
Feeders	0.003	0.0011

- (2) The moisture content of the limestone processed shall not be less than 0.55%.
- (3) The source-wide crushed stone throughput shall not exceed 9,700,500 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits combined with the limited potential emissions from the generators, shall limit the nonfugitive PM and PM₁₀ from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable for Pm and PM₁₀.

(c) Pursuant to 326 IAC 2-2, the diesel generators at this source shall be limited as follows:

- (1) The diesel generators identified as Eleven's Plant Generator, AG-1402; Plant 2 Generator, company number ZVHH0109; and Underground Fan, company number AG-0902; shall be limited to 7,400 hours of operation each per twelve (12) consecutive month period.
- (2) The diesel generator identified as Emergency Back-up Generator, company number AG-0901, shall be limited to 500 hours of operation each per twelve (12) consecutive month period.
- (3) NOx emissions from the Plant 2 Generator, company number ZVHH0109, shall not exceed three hundredths (0.03) lb/hp-hr NOx.
- (4) NOx emissions from the Eleven's Plant Generator, AG-1402, the Underground Fan, company number AG-0902, and the Emergency Back-up Generator, company number AG-0901, shall each not exceed two hundredths (0.02) lb/hp-hr NOx.

Compliance with these limits will limit total source-wide NOx emissions to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable for NOx.

326 IAC 2-4.1-1 (Major Sources of Hazardous Air Pollutants (HAP))

- (a) The equipment in the five plants (Stationary Plant 1, Plant 1A, Plant 2, Eleven's Plant, and Sand Plant) used for crushing, screening, and conveying crushed stone does not emit HAPs. The potential to emit any single HAP from each plant is less than ten (10) tons per year and the potential to emit any combination of HAPs from each plant is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable to these units.
- (b) The diesel generators at this source were constructed after July 27, 1997. The potential to emit any single HAP from each generator is less than ten (10) tons per year and the potential to emit any combination of HAPs from all the generators is less than twenty-five

(25) tons per year. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable to these units.

326 IAC 2-6 (Emission Reporting)

This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM_{10} is less than 250 tons per year; and the potential to emit of CO, NO_x, and SO₂ is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2012, and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

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 Eleven's Plant (formerly Stationary Plant 2A) 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 Determination – Aggregate Processing
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326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-1(b)(14), the following units are exempt from the requirements of 326 IAC 6-3-2 because each unit has an uncontrolled potential to emit less than 0.551 pounds of particulate per hour:

- (1) Plant 1 Crusher identified as MI0102;
- (2) Plant 1 Rock Wash Operation Feeder identified as MK0302;
- (3) Plant 1A Crusher identified as MI0504;
- (4) Plant 2 Feeder identified as MK0110;
- (5) Eleven's Plant Crusher identified as AI1402; and
- (6) Sand Plant Feeders identified as MK0304 and MK0305.

- (b) Pursuant to 326 IAC 6-3-2, the particulate emissions from the feeding, crushing, screening and conveyance process equipment shall not exceed the pounds per hour limitations provided in the table below. The pound per hour limitations were calculated with the following equations:

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour
P = process weight rate in tons per hour

- (2) 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:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour
 P = process weight rate in tons per hour

Plant 1

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1 Crushers		
MI0101	1,200	79.97
MI0104	250	60.96
MI0106	250	60.96
Plant 1 Conveyors		
MJ0101	1,500	82.95
MJ0103	1,500	82.95
MJ0105	1,500	82.95
MJ0106	1,200	79.97
MJ0107	1,200	79.97
MJ0109	1,200	79.97
MJ0110	1,200	79.97
MJ0111	1,200	79.97
MJ0117	1,200	79.97
MJ0119	1,200	79.97
MJ0122	1,200	79.97
MJ0127	1,200	79.97
MJ0102	1,000	77.59
MJ0104	1,000	77.59
MJ0108	1,000	77.59
MJ0112	1,000	77.59
MJ0113	1,000	77.59
MJ0114	1,000	77.59
MJ0115	1,000	77.59
MJ0116	1,000	77.59
MJ0121	1,000	77.59
MJ0123	1,000	77.59

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1 Conveyors (Continued)		
MJ0124	1,000	77.59
MJ0125	1,000	77.59
MJ0126	1,000	77.59
MJ0128	1,000	77.59
Plant 1 Screens		
MK0101	1,200	79.97
MK0102	1,250	80.51
MK0103	820	75.05
MK0105	820	75.05
MK0106	820	75.05
MK0107	820	75.05
MK0114	820	75.05
MK0115	820	75.05
MK0108	770	74.26
Plant 1 Wash Loadout Plant		
decks)	each deck 1,250	each deck 80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Plant 1 Feeders		
MK0109	1,000	77.59
MK0116	200	58.51
MK0111	400	66.31
MK0112	400	66.31

Plant 1A

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1A Crushers		
MI0501	800	74.74
MI0503	400	66.31
Plant 1A Conveyors		
MJ0501	1,000	77.59
MJ0502	1,000	77.59
MJ0505	1,000	77.59
MJ0507	1,000	77.59
MJ0512	1,000	77.59
MJ0503	800	74.74
MJ0504	800	74.74
MJ0513	800	74.74
MJ0515	800	74.74
MJ0517	800	74.74
MJ0509	500	68.96

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1A Conveyors (Continued)		
MJ0510	500	68.96
MJ0511	500	68.96
MJ0514	500	68.96
MJ0516	500	68.96
MJ0518	500	68.96
MJ0519	500	68.96
Plant 1A Screens		
MK0503	800	74.74
MK0504	250	60.96
MK0505	250	60.96
Plant 1A Feeders		
MK0509	700	73.06
MK0502	750	73.93
MK0508	400	66.31

Plant 2

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 2 Crushers		
AI0207	1,200	79.97
AI0208	900	76.23
AI0203	750	73.93
AI0204	370	65.41
AI0205	370	65.41
Plant 2 Conveyors		
MJ0201	1,500	82.95
MJ0203	1,500	82.95
MJ0205	1,500	82.95
MJ0207	1,200	79.97
MJ0208	1,200	79.97
MJ0209	1,200	79.97
MJ0210	1,200	79.97
MJ0211	1,200	79.97
MJ0217	1,200	79.97
MJ0202	1,000	77.59
MJ0206	1,000	77.59
MJ0212	1,000	77.59

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 2 Conveyors (Continued)		
MJ0213	1,000	77.59
MJ0214	1,000	77.59
MJ0215	1,000	77.59
MJ0216	1,000	77.59
MJ0218	1,000	77.59
Plant 2 Screens		
MK0202	1,050	78.22
MK0203	1,150	79.41
MK0201	1,245	80.46
MK0204	1,195	79.91
MK0205	1,195	79.91
MK0206	1,195	79.91
MK0207	1,195	79.91
MK0208	1,195	79.91
Plant 2 Feeders		
MK0209	1,200	79.97
MK0214	500	68.96
MK0215	500	68.96

Eleven's Plant

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Eleven's Plant Screen		
AK1404	390	66.02
Eleven's Plant Conveyors		
AJ0921	300	63.00
AJ1418	300	63.00
AJ1419	300	63.00
AJ1420	390	66.02
AJ1421	390	66.02
AJ1422	390	66.02
AJ1423	390	66.02

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Eleven's Plant Conveyors (Continued)		
MJ0128	300	63.00
AJ0943	300	63.00
AJ0945	300	63.00
AJ0946	300	63.00
AJ1409	300	63.00
AJ1411	300	63.00
AJ1424	300	63.00
Eleven's Plant Feeders		
AK1407	300	63.00
AK1405	300	63.00

Sand Plant

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Sand Plant Screen		
MK0306	300	63.00
Sand Plant Conveyors		
MJ0306	300	63.00
MJ0307	300	63.00
MJ0308	300	63.00
MJ0309	300	63.00
MJ0310	300	63.00

- (c) Pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), when the process weight rate exceeds two hundred (200) tons per hour,, 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:

State Rule Applicability Determination – Diesel Generators

326 IAC 6-2 (Particulate Emission Standards for Sources of Indirect Heating)

The combustion units located at the source are not considered sources of indirect heating. Therefore, these units are not subject to the requirements of 326 IAC 6-2.

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

The combustion units at the source are not considered manufacturing processes. Therefore, these units are not subject to the requirements of 326 IAC 6-3.

326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations)

No individual emission unit at this source has the potential to emit twenty-five (25) tons per year of SO₂ or ten (10) pounds per hour of SO₂. Therefore, the requirements of 326 IAC 7-1.1 are not applicable.

326 IAC 8-1-6 (BACT)

No individual emission unit at this source has the potential to emit twenty-five (25) tons per year of VOC. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 9 (Carbon Monoxide Emission Limits)

No emission limit has been established for this source type pursuant to 326 IAC 9-1-2. Therefore, 326 IAC 9 does not apply.

326 IAC 10-5 (Nitrogen Oxide Reduction Program for Internal Combustion Engines (ICE))

The diesel generators at this source do not meet the definition of a "large NO_x SIP Call engine" pursuant to 326 IAC 10-5-2(4). Therefore, 326 IAC 10-5 does not apply.

Compliance Determination and Monitoring Requirements

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

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

Compliance Determination Requirements

In order to ensure compliance with the requirements of 326 IAC 2-2 (PSD), the Permittee shall apply an initial application of water or a mixture of water and wetting agent to control the PM, PM₁₀ emissions from the feeders, crushers, screens, and the conveyors at Stationary Plants 1, 1A, 2, Eleven's, and Sand. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with the requirements of 326 IAC 2-2 (PSD). If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content of at least 0.55 percent of the process stream by weight or greater. The Permittee shall submit to IDEM, OAQ the method for moisture content analysis for approval.

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

Visible Emissions Notations

- (a) Visible emission notations of the feeding, crushing, screening, and conveying operations at Plants 1, 1A, 2, Eleven's, and Sand 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Proposed Changes

The source has requested that several emission units be renamed in this renewal permit. For clarification purposes, the following is a list of the renamed emission units. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Stationary Plant 1 - **Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1 are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.**

- (a) One (1) primary crusher, identified as ~~1-C-4~~**MI0101**, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (b) One (1) secondary crusher, identified as ~~1-C-2~~**MI0102**, installed in 1986, capacity: 750 tons of limestone per hour;
- (c) Two (2) tertiary crushers, identified as ~~1-C-3~~**MI0104 and MI0106**, installed in 1962 and 1987 (~~1-C-3A MI0104~~ was replaced with identical equipment in 1987), capacity: 250 tons of limestone per hour, each;
- (d) ~~Two (2) quaternary crushers (A & B), identified 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.~~

- (d) Three (3) conveyors, identified as ~~1-TP-1~~**MJ0101, MJ0103, MJ0105**, installed in 1986, capacity: 1,500 tons of limestone per hour, each;
- (e) Nine (9) conveyors, identified as ~~1-TP-2~~**MJ0106, MJ0107, MJ0109, MJ0110, MJ0111, MJ0117, MJ0119, MJ0122, MJ0127**, installed in 1986, capacity: 1,200 tons of limestone per hour, each;
- (f) ~~Fifteen (15)~~ **Fourteen (14)** conveyors, identified as ~~1-TP-3~~ **MJ0102, MJ0104, MJ0108, MJ0112 through MJ0116, MJ0121, MJ0123 through MJ0126, and MJ0128**, installed in 1986, capacity: 1,000 tons of limestone per hour each;
- (g) One (1) truck loading and unloading operation, identified as 1-TU-1, installed in 1988, capacity: 1,200 tons of limestone per hour, **including one (1) bin installed in 1996, capacity: 150 tons of limestone;**
- (i) ~~One (1) bin, installed in 1996, capacity: 150 tons of limestone.~~
- (h) One (1) primary screen, identified as ~~4-S-4~~ **MK0101**, installed in 1986, capacity: 1,200 tons of limestone per hour;
- (i) One (1) secondary screen, identified as ~~4-S-2~~ **MK0102**, installed in 1988, capacity: 1,250 tons of limestone per hour;
- (j) Six (6) tertiary screens, identified as ~~4-S-3A through 4-S-3F~~ **MK0103, MK0105 through MK0107, MK0114 and MK0115**, installed in 1986, capacity: 820 tons of limestone per hour, each;
- (k) One (1) final screen, identified as ~~4-S-4~~ **MK0108**, installed in 1986, capacity: 770 tons of limestone per hour;
- (l) One (1) rock wash operation, identified as ~~4-RW-4~~**Wash Loadout Plant**, consisting of dewatering screws, a multideck screen and four (4) conveyors, installed in 1988, capacity: 1,250 tons of limestone per hour;
- (m) **Four (4) feeders as follows:**
 - (1) **one (1) feeder, identified as MK-0109, installed in October of 1987, with an operating capacity of 1000 tons per hour;**
 - (2) **one (1) feeder, identified as MK-0116, installed in February of 2011, with an operating capacity of 200 tons per hour;**
 - (3) **one (1) feeder, identified as MK-0111, installed in October of 1987, with an operating capacity of 400 tons per hour;**
 - (4) **one (1) feeder, identified as MK-0112, installed in October of 1987, with an operating capacity of 400 tons per hour;**

Stationary Plant 1A - **Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Stationary Plant 1A are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983, except for the primary crusher, identified MI0501. Fugitive emissions are controlled by wet suppression.**

- (n) One (1) primary crusher, identified as ~~4A-C-4~~**MI0501**, installed in 1962, capacity: 800 tons of limestone per hour;
- (o) One (1) secondary crusher, identified as ~~4A-C-2~~**MI0504**, installed in 1966 (replaced with equipment in 1992), capacity: 500 tons of limestone per hour;

- (p) One (1) tertiary crusher, identified as ~~4A-C-3MI0503~~, installed in 1992, capacity: 400 tons of limestone per hour;
- (q) One (1) primary screen, identified as ~~4A-S-4MK0503~~, installed in 1992, capacity: 800 tons of limestone per hour;
- (r) Two (2) final screens, identified as ~~4A-S-2MK0504~~ and **MK0505**, installed in 1992, capacity: 500 tons of limestone per hour total;
- (s) Five (5) conveyors, identified as ~~4A-TP-4MJ0501~~, **MJ0502**, **MJ0505**, **MJ0507**, **MJ0512** installed in 1992, capacity: 1,000 tons of limestone per hour, each;
- (t) Five (5) conveyors, identified as ~~4A-TP-2MJ0503~~, **MJ0504**, **MJ0513**, **MJ0515**, **MJ0517**, installed in 1992, capacity: 800 tons of limestone per hour, each;
- (u) Seven (7) conveyors, identified as ~~4A-TP-3MJ0509~~, **MJ0510**, **MJ0511**, **MJ0514**, **MJ0516**, **MJ0518**, **MJ0519** installed in 1992, capacity: 500 tons of limestone per hour, each;
- (v) One (1) truck loading and unloading operation, identified as 1A-TU-1, installed in 1992, including ~~one (1)~~ **two (2)** bin loading operating, installed 1996, capacity: 1,200 tons of limestone per hour;
- (w) **Three (3) feeders as follows:**
 - (1) **one (1) feeder, identified as MK-0509, installed in July of 2011, with an operating capacity of 700 tons per hour;**
 - (2) **one (1) feeder, identified as MK-0502, installed in October of 1992, with an operating capacity of 750 tons per hour;**
 - (3) **one (1) feeder, identified as MK-0508, installed in October of 1992, with an operating capacity of 400 tons per hour;**

Stationary Plant 2 - Fugitive emissions are controlled by wet suppression.

- (x) One (1) primary crusher, identified as ~~2-C-4AI0207~~ installed in 1980, replaced with identical equipment in 1994, capacity: 1,200 tons of limestone per hour;
- (y) One (1) secondary crusher, identified as ~~2-C-2AI0208~~, installed in 1980, capacity: 900 tons of limestone per hour;
- (z) One (1) tertiary crusher, identified as ~~2-C-3AI0203~~, installed in 1980, capacity: 750 tons of limestone per hour;
- (aa) Two (2) quaternary crushers (A & B), identified as ~~2-C-4AI0204~~ and **AI0205**, installed in 1980 (~~2-C-4A AI0204~~ was replaced with identical equipment in 1987), capacity: 370 tons of limestone per hour, each;
- (bb) Three (3) conveyors, identified as ~~2-TP-4MJ0201~~, **MJ0203**, **MJ0205**, installed in 1980, capacity: 1,500 tons of limestone per hour, each;
- (cc) Six (6) conveyors, identified as ~~2-TP-2MJ0207~~, **MJ0208**, **MJ0209**, **MJ0210**, **MJ0211**, **MJ0217**, installed in 1980, capacity: 1,200 tons of limestone per hour;
- (dd) Eight (8) conveyors, identified as ~~2-TP-3MJ0202~~, **MJ0206**, **MJ0212**, **MJ0213**, **MJ0214**, **MJ0215**, **MJ0216**, **MJ0218**, installed in 1980, capacity: 1,000 tons of limestone per hour, each;
- (ee) One (1) primary screen, identified as ~~2-S-4MK0202~~, installed in 1980, capacity: 1,050 tons of limestone per hour;

- (ff) One (1) secondary screen, identified as ~~2-S-2~~**MK0203**, installed in 1980, capacity: 1,150 tons of limestone per hour;
- (gg) One (1) tertiary screen, identified as ~~2-S-3~~**MK0201**, installed in 1980, capacity: 1,245 tons of limestone per hour;
- (hh) Five (5) quaternary screens, identified as ~~2-S-4~~**MK0204 through MK0208**, installed in 1980, capacity: 1,195 tons of limestone per hour each;
- (ii) Two (2) truck loading operations, identified as 2-TL-1 and 2-TL-2, installed in 1980, capacity: 1,200 tons of limestone per hour each;
- (ii) Four (4) feeders as follows:**
 - (1) one (1) feeder, identified as MK-0209, installed in February of 1988, with an operating capacity of 1200 tons per hour;**
 - (2) one (1) feeder, identified as MK-0110, installed in October of 1987, with an operating capacity of 150 tons per hour;**
 - (3) one (1) feeder, identified as MK-0214, installed in April of 2011, with an operating capacity of 500 tons per hour;**
 - (4) one (1) feeder, identified as MK-0215, installed in April of 2011, with an operating capacity of 500 tons per hour;**

Eleven's Plant - **Under 40 CFR 60, Subpart OOO, the crushers, screens, and conveyors at Eleven's Plant are considered existing affected facilities that operate at a crushed stone plant with capacities greater than 136 megagrams (150 tons) per hour and constructed after August 31, 1983. Fugitive emissions are controlled by wet suppression.**

- (kk) One (1) feed hopper, one (1) feed belt and one (1) surge bin installed in 1998;
- (ll) One (1) feeder, identified as ~~AK 4403~~**AK1407**, installed in 1998, capacity: 390 tons of limestone per hour;
- (mm) One (1) secondary crusher, identified as AI1402, installed in 1998, capacity: 390 tons of limestone per hour;
- (nn) One (1) screen, identified as AK1404, installed in 1998, capacity: 390 tons of limestone per hour;
- (oo) Three (3) stackers, identified as ~~LP-TP-3~~**AJ0921, AJ1418, AJ1419**, installed in 1998, capacity: 300 tons of limestone per hour each;
- (pp) Four (4) conveyors, identified as ~~LP-TP-4~~**AJ1420, AJ1421, AJ1422, AJ1423**, installed in 1998, capacity: 390 tons of limestone per hour, each;
- (qq) ~~Six (6)~~**Seven (7)** conveyors, identified as ~~LP-TP-2~~**MJ0128, AJ0943, AJ0945, AJ0946, AJ1409, AJ1411, AJ1424**, installed in 1998, capacity: 300 tons of limestone per hour, each; and
- (rr) Two (2) feeders as follows:**
 - (1) one (1) feeder, identified as AK-1407, installed in June of 1998, with an operating capacity of 300 tons per hour;**
 - (2) one (1) feeder, identified as AK-1405, installed in June of 1998, with an operating capacity of 300 tons per hour;**

Combustion Units

- (ss) One (1) No. 2 fuel oil-fired intermittent electric generator, identified as **Eleven's Plant Generator**, AG-1402, **approved in 1998 for construction at a capacity of 7.40 million British thermal units per hour (783 KW). Actual capacity of the unit is 910 KW (1,223.79 HP). Under 40 CRF 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;**
- (tt) **Three (3) diesel generators identified as follows:**
- (1) **Plant 2 Generator, company number ZVHH0109, capacity of 325 KW (437.07 HP), manufactured in 1987 and start-up in 2004 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an affected facility as an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;**
 - (2) **Underground Fan, company number AG-0902, capacity of 725 KW (975 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants;**
 - (3) **Emergency Back-up Generator, company number AG-0901, capacity of 455 KW (611.9 HP), manufactured in 1992 and start-up in 2001 at Cape Sandy. Under 40 CFR 63, Subpart ZZZZ, this is an existing stationary reciprocating internal combustion engine at an area source of hazardous air pollutants.**

Insignificant Activities

- (f) One (1) wet lime aggregate sand classifying plant, known as Sand Plant (SP), and storage pile created in 1993, with a capacity of 300 tons of limestone per hour, consisting of the following units **[326 IAC 2-2]:**
- (1) **Two (2) feeders, identified as MK0304 and MK0305, installed in 1992, with an operating capacity of 150 tons per hour each;**
 - (2) **One (1) screen, identified as MK0306, installed in 1992, with an operating capacity of 300 tons per hour; and**
 - (3) **Five (5) conveyors, identified as MJ0306 through MJ0310, installed in 1992, with an operating capacity of 300 tons per hour each.**

Furthermore, in this renewal, the following terms and conditions have been removed from the permit and have been replaced with revised terms and/or conditions (see State Rule Applicability – Entire Source Section - 326 IAC 2-2 (Prevention of Significant Deterioration) for revised requirements):

~~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 PM₁₀ 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).~~

Recommendation

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

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

An application for the purposes of this review was received on August 4, 2010.

Conclusion

The operation of this stationary limestone crushing and processing source shall be subject to the conditions of this Part 70 permit T025-29526-00002.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Angela Taylor at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6543 or toll free at 1-800-451-6027 extension 6543.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Emission Unit/ Formery Inven. no.	Emission Unit- Name	Capacity (tons / hour)	326 IAC 6-3-2 PM limit (lb/hr)	EPA emission factor - PM ₁₀ (lb/ton)	Potential emissions (EF EPA) (lb/hr)	EPA emission factor - PM _{2.5} (lb/ton)	Potential emissions (EF EPA) (lb/hr)	Total PM ₁₀ Emissions (ton/yr)	Total PM _{2.5} Emissions (ton/yr)		
Plant 1 Crushers											
Primary	LC-1	MK0101	1200	79.97	0.0007	0.84	0.0007	0.84	3.6792	3.6792	
Secondary	LC-2	MK0102	750	73.93	0.0007	0.555	0.0007	0.526	2.2956	2.2956	
Tertiary	LC-3	MK0104	250	60.96	0.0024	0.6	0.0054	1.35	2.628	5.913	
Tertiary	LC-3	MK0106	250	60.96	0.0024	0.6	0.0054	1.35	2.628	5.913	
Plant 1 Conveyors											
1-TP-1		MJ0101	1500	82.95	0.0011	1.65	0.003	4.5	7.227	19.71	
		MJ0105	1500	82.95	0.0011	1.65	0.003	4.5	7.227	19.71	
		MJ0108	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0207	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0209	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0110	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0111	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0117	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0119	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0122	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
1-TP-2		MJ0107	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0109	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0104	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0108	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0112	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0113	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0114	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0115	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0116	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0121	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
1-TP-3		MJ0123	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0124	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0205	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0206	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0208	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
	Plant 1 Screens										
	Primary	S-1	MK0101	1200	79.97	0.0087	10.44	0.026	30	47.272	131.4
	Secondary	S-2	MK0102	750	73.93	0.0087	10.875	0.026	31.25	47.6305	136.875
	Tertiary	S-3A	MK0103	500	75.05	0.072	59.04	0.3	246	268.592	1077.48
	Tertiary	S-3B	MK0105	500	75.05	0.072	59.04	0.3	246	268.592	1077.48
Tertiary	S-3C	MK0106	500	75.05	0.072	59.04	0.3	246	268.592	1077.48	
Tertiary	S-3D	MK0107	500	75.05	0.072	59.04	0.3	246	268.592	1077.48	
Tertiary	S-3E	MK0114	500	75.05	0.072	59.04	0.3	246	268.592	1077.48	
Tertiary	S-3F	MK0115	500	75.05	0.072	59.04	0.3	246	268.592	1077.48	
Tertiary	S-3G	MK0108	500	75.05	0.072	59.04	0.3	246	268.592	1077.48	
Plant 1 Wash Loadout Plant											
screen	multibook screen (3 deck)	1250	80.51	0.0087	10.875	0.026	31.25	47.6305	136.875		
		1250	80.51	0.0087	10.875	0.026	31.25	47.6305	136.875		
conveyor		1250	80.51	0.0087	10.875	0.026	31.25	47.6305	136.875		
		1250	80.51	0.0011	1.375	0.003	3.75	6.0225	16.425		
feeder		1250	80.51	0.0011	1.375	0.003	3.75	6.0225	16.425		
		1250	80.51	0.0011	1.375	0.003	3.75	6.0225	16.425		
Plant 1 Feeders											
		MK0109	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MK0116	400	66.31	0.0011	0.44	0.003	1.2	1.9272	5.256	
		MK0111	400	66.31	0.0011	0.44	0.003	1.2	1.9272	5.256	
		MK0112	400	66.31	0.0011	0.44	0.003	1.2	1.9272	5.256	
Plant 1A Crushers											
Primary	1A-C-1	MK0501	300	74.74	0.0007	0.55	0.0007	0.55	2.4538	2.4538	
Secondary	1A-C-2	MK0504	500	68.96	0.0007	0.35	0.0007	0.35	1.533	1.533	
Tertiary	1A-C-3	MK0503	400	66.31	0.0011	0.46	0.0054	2.16	4.2488	9.4888	
Primary	1A-S-1	MK0503	800	74.74	0.0087	6.86	0.026	30	39.488	87.6	
Quaternary-Final	1A-S-2	MK0505	250	60.96	0.072	16	0.3	75	78.84	328.5	
Quaternary-Final	1A-S-2	MK0505	250	60.96	0.072	16	0.3	75	78.84	328.5	
Plant 1A Conveyors											
1A-TP-1		MJ0501	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0502	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0505	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0507	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0509	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0503	800	74.74	0.0011	0.88	0.003	2.4	3.8544	10.512	
		MJ0504	800	74.74	0.0011	0.88	0.003	2.4	3.8544	10.512	
		MJ0513	800	74.74	0.0011	0.88	0.003	2.4	3.8544	10.512	
		MJ0515	800	74.74	0.0011	0.88	0.003	2.4	3.8544	10.512	
		MJ0517	800	74.74	0.0011	0.88	0.003	2.4	3.8544	10.512	
1A-TP-2		MJ0509	500	68.96	0.0011	0.55	0.003	1.5	2.409	6.57	
		MJ0511	500	68.96	0.0011	0.55	0.003	1.5	2.409	6.57	
		MJ0514	500	68.96	0.0011	0.55	0.003	1.5	2.409	6.57	
		MJ0516	500	68.96	0.0011	0.55	0.003	1.5	2.409	6.57	
		MJ0518	500	68.96	0.0011	0.55	0.003	1.5	2.409	6.57	
		MJ0519	500	68.96	0.0011	0.55	0.003	1.5	2.409	6.57	
		MK0509	700	73.06	0.0011	0.77	0.003	2.1	3.3776	9.198	
		MK0502	750	73.93	0.0011	0.825	0.003	2.25	3.6135	9.855	
		MK0508	400	66.31	0.0011	0.44	0.003	1.2	1.9272	5.256	
	Plant 2 Crushers										
Primary	2-C-1	AK0207	1200	79.97	0.0007	0.84	0.0007	0.84	3.6792	3.6792	
Secondary	2-C-2	AK0208	900	79.21	0.0007	0.63	0.0007	0.63	2.7584	2.7584	
Tertiary	2-C-3	AK0203	750	73.93	0.0024	1.8	0.0054	4.05	7.881	17.739	
Quaternary	2-C-4	AK0204	375	65.41	0.016	5.55	0.039	14.43	23.309	63.209	
Quaternary	2-C-4	AK0205	375	65.41	0.016	5.55	0.039	14.43	23.309	63.209	
Plant 2 Conveyors											
2-TP-1		MJ0201	1500	82.95	0.0011	1.65	0.003	4.5	7.227	19.71	
		MJ0203	1500	82.95	0.0011	1.65	0.003	4.5	7.227	19.71	
		MJ0205	1500	82.95	0.0011	1.65	0.003	4.5	7.227	19.71	
		MJ0207	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0208	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0209	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0210	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0211	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0217	1200	79.97	0.0011	1.32	0.003	3.6	5.7816	15.768	
		MJ0206	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
2-TP-2		MJ0212	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0213	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0214	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0215	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0216	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
		MJ0218	1000	77.59	0.0011	1.1	0.003	3	4.818	13.14	
	Plant 2 Screens										
	Primary	2-S-1	MK0202	1050	78.22	0.0087	9.155	0.026	26.25	40.013	114.975
	Secondary	2-S-2	MK0203	1150	74.45	0.0087	10.005	0.026	28.75	42.8219	129.528
	Tertiary	2-S-3	MK0201	1245	80.46	0.072	89.64	0.3	373.5	392.6232	1635.50
Quaternary	2-S-4	MK0204	1195	78.91	0.072	86.04	0.3	368.5	376.8652	1570.23	
Quaternary	2-S-4	MK0205	1195	78.91	0.072	86.04	0.3	368.5	376.8652	1570.23	
Quaternary	2-S-4	MK0206	1195	78.91	0.072	86.04	0.3	368.5	376.8652	1570.23	
Quaternary	2-S-4	MK0207	1195	78.91	0.072	86.04	0.3	368.5	376.8652	1570.23	
Quaternary	2-S-4	MK0208	1195	78.91	0.072	86.04	0.3	368.5	376.8652	1570.23	
Plant 2 Feeders											

Type of unit	Emission Unit - Formerly known as	Emission Unit - New Name	Capacity (tons/hour)	EPA emission factor - PM ₁₀ (lb/ton)	Potential emissions PM ₁₀ (lb/hr)	EPA emission factor - PM (lb/ton)	Potential emissions PM (lb/hr)	Total Controlled PM ₁₀ Emissions (lb/day)	Total Controlled PM Emissions (lb/day)
Plant 1 Crushers									
Primary	1-C-1	MR101	1500	0.0002	0.30	0.0002	0.30	1.0812	1.0812
Secondary	1-C-2	MR102	1500	0.0002	0.30	0.0002	0.30	0.957	0.957
Tertiary	1-C-3	MR104	250	0.0004	0.10	0.0002	0.05	0.0113	1.14
Quaternary	1-C-4	MR106	250	0.0004	0.10	0.0002	0.05	0.0113	1.14
Plant 1 Conveyors									
1-TF-1	MR103	1500	0.0004	0.60	0.0004	0.25	0.3022	0.9198	
1-TF-3	MR105	1500	0.0004	0.60	0.0004	0.25	0.3022	0.9198	
1-TF-3	MR104	1500	0.0004	0.60	0.0004	0.25	0.3022	0.9198	
1-TF-1	MR106	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR107	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR108	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR110	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR111	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR112	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR115	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR117	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR119	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR120	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-2	MR122	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR127	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR128	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR129	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR130	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR131	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR132	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR133	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR134	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR135	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR136	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR137	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR138	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR139	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR140	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR141	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR142	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR143	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR144	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR145	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR146	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR147	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR148	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR149	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR150	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR151	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR152	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR153	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR154	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR155	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR156	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR157	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR158	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR159	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR160	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR161	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR162	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR163	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR164	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR165	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR166	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR167	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR168	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR169	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR170	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR171	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR172	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR173	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR174	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR175	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR176	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR177	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR178	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR179	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR180	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR181	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR182	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR183	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR184	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR185	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR186	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR187	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR188	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR189	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR190	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR191	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR192	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR193	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR194	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR195	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR196	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR197	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR198	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR199	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR200	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR201	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR202	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR203	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR204	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR205	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR206	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR207	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR208	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR209	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR210	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR211	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR212	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR213	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR214	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR215	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF-3	MR216	1500	0.0004	0.60	0.0004	0.168	0.241776	0.73684	
1-TF									

Appendix A: Emission Calculations
Criteria Pollutants - Internal Combustion Engines - Diesel Fuel

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Sulfur Content (S) of Fuel (% by weight) **0.500**

Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<600 HP)

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)								
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO		
				2.20E-03	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03		
				Potential Emissions (TPY)								
PM	PM-10	PM-2.5	SOx	NOx	VOC	CO						
PLT 2 Gen.	325	437.07	3,828,719	4.212	4.212	4.212	3.924	59.345	4.728	12.788		
Co. # ZVHH0109												

Green House Gas Emissions (GHG)

Emission Unit ID	Pollutant			Summed Potential Emissions in tons/yr
PLT 2 Gen.				2.20E+03
Co. # ZVHH0109	CO2	CH4	N2O	CO2e Total in tons/yr
Emission Factor in lb/hp-hr	1.15E+00	4.64E-05	9.28E-06	
Potential Emission in tons/yr	2.20E+03	8.88E-02	1.78E-02	2208.88

Methodology

For HP < 600
 HP=Kw/hr*1.344825737
 hp-hr/yr = hp * 8760 hr/yr
 Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01
 Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP

Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)								
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO		
				7.00E-04	7.00E-04	7.00E-04	4.00E-03	2.40E-02	7.05E-04	5.50E-03		
				Potential Emissions (TPY)								
PM	PM-10	PM-2.5	SOx	NOx	VOC	CO						
Underground Fan	725	975.00	8,540,988	2.989	2.989	2.989	17.082	102.492	3.011	23.488		
AG-0902												

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)								
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO		
				7.00E-04	7.00E-04	7.00E-04	4.00E-03	2.40E-02	7.05E-04	5.50E-03		
				Potential Emissions (TPY)								
PM	PM-10	PM-2.5	SOx	NOx	VOC	CO						
Eleven's Plant Gen.	910	1223.79	10,720,413	3.752	3.752	3.752	21.441	128.645	3.779	29.481		
AG-1402												

Emergency Generator Per EPA Memorandum (09/06/1995), potential emissions were calculated based on 500 hours of operation per year since the generators are used solely to provide backup power.

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)								
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO		
				7.00E-04	7.00E-04	7.00E-04	4.00E-03	2.40E-02	7.05E-04	5.50E-03		
				Potential Emissions (TPY)								
PM	PM-10	PM-2.5	SOx	NOx	VOC	CO						
Emergency Back up Generator	455.00	611.90	305,948	0.107	0.107	0.107	0.612	3.671	0.108	0.841		
AG-0901												

Green House Gas Emissions (GHG)

Emission Unit ID	Pollutant			Summed Potential Emissions in tons/yr
Underground Fan				4.95E+03
AG-0902	CO2	CH4	N2O	CO2e Total in tons/yr
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	
Potential Emission in tons/yr	4.95E+03	2.71E-01	3.97E-02	4971.77

Emission Unit ID	Pollutant			Summed Potential Emissions in tons/yr
Eleven's Plant Gen.				6.22E+03
AG-1402	CO2	CH4	N2O	CO2e Total in tons/yr
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	
Potential Emission in tons/yr	6.22E+03	3.40E-01	4.98E-02	6240.43

Emission Unit ID	Pollutant			Summed Potential Emissions in tons/yr
Emergency Back up Generator				1.77E+02
AG-0901	CO2	CH4	N2O	CO2e Total in tons/yr
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	
Potential Emission in tons/yr	1.77E+02	9.71E-03	1.42E-03	178.09

Methodology

For HP > 600
 HP=Kw/hr*1.344825737
 hp-hr/yr = hp * 500 hr/yr for emergency generators
 hp-hr/yr = hp * 8760 hr/yr for regularly operating generators
 Emission Factors are from AP 42, Chapter 3.4, Table 3.4-1, SCC #2-02-004-01
 Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP

Total Potential Emissions	PM	PM-10	PM-2.5	SOx	NOx	VOC	CO	CO2e
	11.060	11.060	11.060	43.059	294.153	11.626	66.598	13,599.19

Appendix A: Emission Calculations
HAPs - Internal Combustion Engines - Diesel Fuel

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<600 HP)

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)							
				Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH
				6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emissions (TPY)											
Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH				
PLt 2 Gen.	325	437.07	3,828,719	0.013	0.005	0.004	0.001	0.016	0.010	0.001	0.002
Co. # ZVHH0109											

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Methodology

For HP < 600
 HP=Kw/hr*1.344825737
 hp-hr/yr = hp * 8760 hr/yr
 Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01
 Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)							
				Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH	
				5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06	
Potential Emissions (TPY)											
Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH					
Underground Fan	725	975.00	8,540,988	0.023	0.008	0.006	0.002	0.001	0.000	0.000	0.006
AG-0902											

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)							
				Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH	
				5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06	
Potential Emissions (TPY)											
Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH					
Eleven's Plant Gen.	910	1223.79	10,720,413	0.029	0.011	0.007	0.003	0.001	0.000	0.000	0.008
AG-1402											

Emergency Generator Per EPA Memorandum (09/06/1995), potential emissions were calculated based on 500 hours of operation per year since the generators are used solely to provide backup power.

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)							
				Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH	
				5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06	
Potential Emissions (TPY)											
Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH					
Emergency Back up Generator	455.00	611.90	305,948	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AG-0901											

Methodology

For HP > 600
 HP=Kw/hr*1.344825737
 hp-hr/yr = hp * 500 hr/yr for emergency generators
 hp-hr/yr = hp * 8760 hr/yr for regularly operating generators
 Emission Factors are from AP 42, Chapter 3.4, Table 3.4-1, SCC #2-02-004-01
 Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

Total Potential Emissions

Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH	Total HAPs
0.066	0.025	0.017	0.001	0.021	0.012	0.002	0.017	0.160

Appendix A: Emission Calculations
Stone Quarry and Processing - Transport and Loading

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Stationary Plant 1A

PM emissions before controls 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).

total trip/hr x	16	
miles/round trip x	0.5	
hr/yr =	8,760	70,080 miles per year

PM Emissions

$$E_f = k \cdot [(s/12)^{0.7}] \cdot [(W/3)^b]$$

= 16.01 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)
s = 9.15 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

$$E = \frac{16.01 \text{ lb/mi} \times 70,080 \text{ mi/yr}}{2,000 \text{ lb/ton}} = 561.00 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \boxed{368.88 \text{ tons/yr}}$$

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

PM-10 Emissions

$$E_f = k \cdot [(s/12)^{0.9}] \cdot [(W/3)^b]$$

= 4.64 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s = 9.15 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

$$E = \frac{4.64 \text{ lb/mi} \times 70,080 \text{ mi/yr}}{2,000 \text{ lb/ton}} = 162.67 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \boxed{106.96 \text{ tons/yr}}$$

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

Controlled Transport

Pollutant	Potential Emissions	Control Efficiency	After Control Potential Emissions
PM	368.88	50%	184.44
PM10	106.96	50%	53.48

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).

Loading & Unloading, 1A-TU-1

1A-TU-1 Capacity (tons/hr) 1200

PM, PM10, PM2.5 Potential Emissions (tons/yr) **8.50**

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

= 0.0016 lb/ton

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

Methodology

Capacity (ton/hr) x EF (lb/ton) x 2000 (lb/ton) x 8760 (hr/yr).

Appendix A: Emission Calculations
Stone Quarry and Processing - Transport and Loading

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Stationary Plant 2

PM emissions before controls 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).

total trip/hr x	24.9	
miles/round trip x	0.92	
hr/yr =	8,760	200,674.08 miles per year

PM Emissions

$$E_f = k \cdot [(s/12)^{0.7}] \cdot [(W/3)^b]$$

= 16.01 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)
s = 9.15 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

$$E = \frac{16.01 \text{ lb/mi} \times 200,674.08 \text{ mi/yr}}{2,000 \text{ lb/ton}} = 1606.43 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 1056.28 \text{ tons/yr}$$

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

PM-10 Emissions

$$E_f = k \cdot [(s/12)^{0.9}] \cdot [(W/3)^b]$$

= 4.64 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s = 9.15 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

$$E = \frac{4.64 \text{ lb/mi} \times 200,674.08 \text{ mi/yr}}{2,000 \text{ lb/ton}} = 465.81 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = 306.28 \text{ tons/yr}$$

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

Controlled Transport

Pollutant	Potential Emission	Control Efficiency	After Control Potential Emissions
PM	1056.28	50%	528.14
PM10	306.28	50%	153.14

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).

Loading & Unloading, 2-TL-1 and 2-TL-2

2-TL-1 and 2-TL-2 Capacity (tons/hr) 2400

PM, PM10, PM2.5 Potential Emissions (tons/yr) 16.99

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

= 0.0016 lb/ton

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

Methodology

Capacity (ton/hr) x EF (lb/ton) x 2000 (lb/ton) x 8760 (hr/yr).

Appendix A: Emission Calculations
Stone Quarry and Processing - Transport and Loading

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Stationary Eleven's Plant

PM emissions before controls 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).

total trip/hr x	8	
miles/round trip x	0.92	
hr/yr =	8,760	62,861.76 miles per year

PM Emissions

$$E_f = k \cdot [(s/12)^{0.7}] \cdot [(W/3)^b]$$

= 16.01 lb/mile

where k = 4.9 (particle size multiplier for PM) (k=1.5 for PM-10)
s = 9.15 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

$$E = \frac{16.01 \text{ lb/mi} \times 62,861.76 \text{ mi/yr}}{2,000 \text{ lb/ton}} = 503.22 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \boxed{330.88 \text{ tons/yr}}$$

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

PM-10 Emissions

$$E_f = k \cdot [(s/12)^{0.9}] \cdot [(W/3)^b]$$

= 4.64 lb/mile

where k = 1.5 (particle size multiplier for PM-10) (k=4.9 for PM-30 or TSP)
s = 9.15 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

$$E = \frac{4.64 \text{ lb/mi} \times 62,861.76 \text{ mi/yr}}{2,000 \text{ lb/ton}} = 145.91 \text{ tons/yr}$$

Taking natural mitigation due to precipitation into consideration:

$$E_{ext} = E \cdot [(365-p)/365] = \boxed{95.94 \text{ tons/yr}}$$

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

Controlled Transport

Pollutant	Potential Emission	Control Efficiency	After Control Potential Emissions
PM	330.88	50%	165.44
PM10	95.94	50%	47.97

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 Loading & Unloading

Capacity (tons/hr) 390

PM, PM10, PM2.5 Potential Emissions (tons/yr) **2.76**

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

= 0.0016 lb/ton

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

Methodology

Capacity (ton/hr) x EF (lb/ton) x 2000 (lb/ton) x 8760 (hr/yr).

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

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Fugitive Emissions from crushed limestone Storage Piles - Plants 1, 1A 2, and Elevens

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

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

$$E_f = 1.7 (s/1.5) * (365-p) / 235 * (f/15) = 1.85 \text{ lb/ac/day}$$

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

$$\begin{aligned} \text{Storage capacity (SC) of site (tons)} &= (\# \text{ acres}) * (43560 \text{ sqft/acre}) * (25 \text{ ft high}) * (1/40 \text{ ton/cuft}) \\ \text{Storage capacity (SC) of site (tons)} &= 1,742,400 \end{aligned}$$

$$\text{Potential PM Emissions (tpy)} = E_f * SC * (40 \text{ cuft/ton}) * 365 \text{ day/yr} / (2000 \text{ lb/ton} * 43560 \text{ sqft/acre} * 25 \text{ ft})$$

Potential PM Emissions (tpy) = 21.63 tpy
Potential PM10/PM2.5 Emissions (tpy) = 21.63 tpy

Sand Plant

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

$$E_f = 1.7 (s/1.5) * (365-p) / 235 * (f/15) = 1.85 \text{ lb/ac/day}$$

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

$$\begin{aligned} \text{Storage capacity (SC) of site (tons)} &= (\# \text{ acres}) * (43560 \text{ sqft/acre}) * (25 \text{ ft high}) * (1/40 \text{ ton/cuft}) \\ \text{Storage capacity (SC) of site (tons)} &= 54,450 \end{aligned}$$

$$\text{Potential PM Emissions (tpy)} = E_f * SC * (40 \text{ cuft/ton}) * 365 \text{ day/yr} / (2000 \text{ lb/ton} * 43560 \text{ sqft/acre} * 25 \text{ ft})$$

Potential PM Emissions (tpy) = 0.676 tpy
Potential PM10/PM2.5 Emissions (tpy) = 0.676 tpy

Total fugitive PM emissions from Storage:

	<u>Uncontrolled PTE</u>		<u>Controlled PTE</u>
Storage	22.31 tons/yr x	10% emitted after controls =	2.23 tons/yr

Total fugitive PM-10 emissions from Storage:

	<u>Uncontrolled PTE</u>		<u>Controlled PTE</u>
Storage	22.31 tons/yr x	10% emitted after controls =	2.23 tons/yr

Appendix A: Emissions Calculations
Particulates from Crushing, Screening, and Conveyors - Stone Processing
Limited Potential Emissions

Company Name: National Crushed Stone, Inc. (Cape Stone Facility)
 Address City N Zip: 19025 S. Alton Fincastle Road, Levensworth, Indiana 47137
 County: Crawford
 SIC Code: 1422
 Permit Renewal No.: T-02-29268-0002
 Renewer: JPT
 Date: 03/30/11
 Limited Throughput (tph) = 9,700,500

Type of unit	Emission Unit - Formerly Known As	Emission Unit - New Name	Capacity (tons / hour)	Capacity (tons / yr)	328 IAC 2-2 limit PM ₁₀ (Dblon - EPA emission factor)	328 IAC 2-2 limit PM _{2.5} (Dblon - EPA emission factor)	Total Controlled PM ₁₀ Emissions (tons/yr)	Total Controlled PM _{2.5} Emissions (tons/yr)
Plant 1 Crushers								
Primary	1-C-1	M0101	1500	13,142,000	0.0002	0.0002	0.2921	0.2921
Secondary	1-S-2	M0102	750	6,571,000	0.0002	0.0002	0.1460	0.1460
Tertiary	1-T-3	M0104	250	2,190,000	0.0004	0.0012	0.0513	1.5240
Tertiary	M0106	250	2,190,000	0.0004	0.0012	0.0513	1.5240	
Plant 1 Conveyors								
1-TF-1	M0103	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0102	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0104	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-1	M0105	(combined)	1500	13,142,000	0.0004	0.0014	0.2231	0.6790
1-TF-2	M0107	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-2	M0109	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-2	M0110	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-2	M0111	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0112	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0115	(combined)	1500	13,142,000	0.0004	0.0014	0.2231	0.6790
1-TF-2	M0117	(combined)	1500	13,142,000	0.0004	0.0014	0.2231	0.6790
1-TF-3	M0123	(combined)	1500	13,142,000	0.0004	0.0014	0.2231	0.6790
1-TF-2	M0119	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-2	M0122	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-2	M0127	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0124	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0128	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0129	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0131	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0134	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0137	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0138	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0141	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0144	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0147	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0150	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0153	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0156	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0159	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
1-TF-3	M0162	1500	13,142,000	0.0004	0.0014	0.2231	0.6790	
Plant 2 Crushers								
Primary	2-C-1	M0201	1500	13,142,000	0.0002	0.0002	3.5892	10.6708
Secondary	2-S-2	M0202	750	6,571,000	0.0002	0.0002	3.5892	10.6708
Tertiary	2-T-3	M0204	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0206	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0208	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0210	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0212	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0214	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0216	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0218	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0220	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0222	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0224	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0226	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0228	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0230	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0232	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0234	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0236	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0238	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0240	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0242	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0244	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0246	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0248	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0250	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0252	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0254	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0256	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0258	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0260	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0262	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0264	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0266	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0268	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0270	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0272	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0274	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0276	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0278	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0280	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0282	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0284	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0286	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0288	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0290	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0292	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0294	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0296	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0298	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0300	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0302	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0304	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0306	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0308	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0310	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0312	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0314	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0316	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0318	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0320	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0322	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0324	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0326	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0328	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0330	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0332	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0334	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0336	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0338	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0340	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0342	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0344	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0346	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0348	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0350	250	2,190,000	0.0022	0.0036	10.6708	17.4609
Tertiary	2-T-3	M0352	250	2,190,000	0.0022	0.		

**Appendix A: Limited Emission Calculations
Internal Combustion Engines - Diesel Fuel**

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Limited hours of operation	7,400
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Sulfur Content (S) of Fuel (% by weight) 0.500

**Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<600 HP)**

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	limited hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)						
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
PL1 2 Gen.	325	437.07	3,234,306	2.20E-03	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Co. # ZVHH0109										
lb/hr limit				0.96	0.96	0.96	0.90	13.55	1.08	2.92
Limited Potential Emissions (TPY)										
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
				3.558	3.558	3.558	3.315	50.132	3.994	10.803

Green House Gas Emissions (GHG)

Emission Unit ID	Pollutant			Summed Potential Emissions in tons/yr	
PL1 2 Gen.					1.86E+03
Co. # ZVHH0109	CO2	CH4	N2O		CO2e Total in tons/yr 1865.95
Emission Factor in lb/hp-hr	1.15E+00	4.64E-05	9.28E-06		
Potential Emission in tons/yr	1.86E+03	7.50E-02	1.50E-02		

Methodology

For HP < 600

HP=Kw/hr*1.344825737

limited hp-hr/yr = hp * limited hours of operation

Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01

Limited Emissions (tons/yr) = (limited hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP

**Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)**

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	limited hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)						
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
Underground Fan	725	975.00	7,214,990	7.000E-04	7.000E-04	7.000E-04	4.000E-03	2.400E-02	7.050E-04	5.500E-03
AG-0902										
lb/hr limit				0.68	0.68	0.68	3.90	23.40	0.69	5.36
Limited Potential Emissions (TPY)										
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
				2.525	2.525	2.525	14.430	86.580	2.543	19.841

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	limited hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)						
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
Eleven's Plant Gen.	910	1223.79	9,056,057	7.000E-04	7.000E-04	7.000E-04	4.000E-03	2.400E-02	7.050E-04	5.500E-03
AG-1402										
lb/hr limit				0.86	0.86	0.86	4.90	29.37	0.86	6.73
Limited Potential Emissions (TPY)										
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
				3.170	3.170	3.170	18.112	108.673	3.192	24.904

Limited hours of operation	500
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Emergency Generator Per EPA Memorandum (09/06/1995), potential emissions were calculated based on 500 hours of operation per year since the generators are used solely to provide backup power.

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	limited hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)						
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
Emergency Back up Generator	455.00	611.90	305,948	7.000E-04	7.000E-04	7.000E-04	4.000E-03	2.400E-02	7.050E-04	5.500E-03
AG-0901										
lb/hr limit				0.43	0.43	0.43	2.45	14.69	0.43	3.37
Limited Potential Emissions (TPY)										
				PM	PM-10	PM-2.5	SOx	NOx	VOC	CO
				0.107	0.107	0.107	0.612	3.671	0.108	0.841

Emission Unit ID	Pollutant			Green House Gas Emissions (GHG)	
Underground Fan					
AG-0902	CO2	CH4	N2O	Summed Potential Emissions in tons/yr	4.18E+03
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	CO2e Total in tons/yr	4199.90
Potential Emission in tons/yr	4.18E+03	2.29E-01	3.35E-02		

Emission Unit ID	Pollutant			Green House Gas Emissions (GHG)	
Eleven's Plant Gen.					
AG-1402	CO2	CH4	N2O	Summed Potential Emissions in tons/yr	5.25E+03
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	CO2e Total in tons/yr	5271.60
Potential Emission in tons/yr	5.25E+03	2.87E-01	4.21E-02		

Emission Unit ID	Pollutant			Green House Gas Emissions (GHG)	
MM045					
AG-1402	CO2	CH4	N2O	Summed Potential Emissions in tons/yr	1.77E+02
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	CO2e Total in tons/yr	178.09
Potential Emission in tons/yr	1.77E+02	9.71E-03	1.42E-03		

Methodology

For HP > 600

HP=Kw/hr*1.344825737

limited hp-hr/yr = hp * 500 hr/yr for emergency generators

limited hp-hr/yr = hp * limited hours of operation for regularly operating generators

Emission Factors are from AP 42, Chapter 3.4, Table 3.4-1, SCC #2-02-004-01

Limited Emissions (tons/yr) = (limited hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP

Total Potential Emissions	PM	PM-10	PM-2.5	SOx	NOx	VOC	CO	CO2e
	9.360	9.360	9.360	36.469	249.056	9.838	56.389	11,515.55

Appendix A: Emission Calculations
Limited HAPs - Internal Combustion Engines - Diesel Fuel

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County: Crawford
SIC Code: 1422
Permit Renewal No.: T025-29526-00002
Reviewer: APT
Date: 03/30/11

Limited Hours of Operation	7,400
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Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<600 HP)

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)									
				Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH		
				6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06		
Limited Potential Emissions (TPY)													
Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH						
PLT 2 Gen.	325	437.07	3,234,306	0.011	0.005	0.003	0.000	0.013	0.009	0.001	0.002		
Co. # ZVHH0109													

PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Methodology

For HP < 600

HP=Kw/hr*1.344825737

limited hp-hr/yr = hp * limited hours of operation

Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01

Limited Emissions (tons/yr) = (limited hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)								
				Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH		
				5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06		
Limited Potential Emissions (TPY)												
Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH						
Underground Fan	725	975.00	7,214,990	0.020	0.007	0.005	0.002	0.001	0.000	0.005		
AG-0902												

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)								
				Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH		
				5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06		
Limited Potential Emissions (TPY)												
Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH						
Eleven's Plant Gen.	910	1223.79	9,056,057	0.025	0.009	0.006	0.003	0.001	0.000	0.007		
AG-1402												

Limited hours of operation	500
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Emergency Generator Per EPA Memorandum (09/06/1995), potential emissions were calculated based on 500 hours of operation per year since the generators are used solely to provide backup power.

Emission Unit ID	Capacity (KW/hr)	Capacity (HP)	hp-hr/yr	Diesel Industrial Engines Emission Factors (lb/hp-hr)									
				Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH			
				5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06			
Limited Potential Emissions (TPY)													
Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH							
Emergency Back up Generator	455.00	611.90	305,948	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
AG-0901													

Methodology

For HP > 600

HP=Kw/hr*1.344825737

limited hp-hr/yr = hp * 500 hr/yr for emergency generators

limited hp-hr/yr = hp * limited hours of operation for regularly operating generators

Emission Factors are from AP 42, Chapter 3.4, Table 3.4-1, SCC #2-02-004-01

Limited Emissions (tons/yr) = (limited hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

Total Limited Potential Emissions

Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH	Total HAPs
0.056	0.021	0.014	0.000	0.018	0.010	0.002	0.014	0.135

Company Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
 Address City IN Zip: 19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
 County: Crawford
 SIC Code: 1422
 Permit Renewal No.: T025-29526-00002
 Reviewer: APT
 Date: 03/30/11

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1 Crushers		
MI0101	1,200	79.97
MI0104	250	60.96
MI0106	250	60.96
Plant 1 Conveyors		
MJ0101	1,500	82.95
MJ0103	1,500	82.95
MJ0105	1,500	82.95
MJ0106	1,200	79.97
MJ0107	1,200	79.97
MJ0109	1,200	79.97
MJ0110	1,200	79.97
MJ0111	1,200	79.97
MJ0117	1,200	79.97
MJ0119	1,200	79.97
MJ0122	1,200	79.97
MJ0127	1,200	79.97
MJ0102	1,000	77.59
MJ0104	1,000	77.59
MJ0108	1,000	77.59
MJ0112	1,000	77.59
MJ0113	1,000	77.59
MJ0114	1,000	77.59
MJ0115	1,000	77.59
MJ0116	1,000	77.59
MJ0121	1,000	77.59
MJ0123	1,000	77.59

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1 Conveyors (Continued)		
MJ0124	1,000	77.59
MJ0125	1,000	77.59
MJ0126	1,000	77.59
MJ0128	1,000	77.59
Plant 1 Screens		
MK0101	1,200	79.97
MK0102	1,250	80.51
MK0103	820	75.05
MK0105	820	75.05
MK0106	820	75.05
MK0107	820	75.05
MK0114	820	75.05
MK0115	820	75.05
MK0108	770	74.26
Plant 1 Wash Loadout Plant		
decks)	each deck 1,250	each deck 80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Conveyor	1,250	80.51
Plant 1 Feeders		
MK0109	1,000	77.59
MK0116	200	58.51
MK0111	400	66.31
MK0112	400	66.31

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1A Crushers		
MI0501	800	74.74
MI0503	400	66.31
Plant 1A Conveyors		
MJ0501	1,000	77.59
MJ0502	1,000	77.59
MJ0505	1,000	77.59
MJ0507	1,000	77.59
MJ0512	1,000	77.59
MJ0503	800	74.74
MJ0504	800	74.74
MJ0513	800	74.74
MJ0515	800	74.74
MJ0517	800	74.74
MJ0509	500	68.96

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 1A Conveyors (Continued)		
MJ0510	500	68.96
MJ0511	500	68.96
MJ0514	500	68.96
MJ0516	500	68.96
MJ0518	500	68.96
MJ0519	500	68.96
Plant 1A Screens		
MK0503	800	74.74
MK0504	250	60.96
MK0505	250	60.96
Plant 1A Feeders		
MK0509	700	73.06
MK0502	750	73.93
MK0508	400	66.31

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 2 Crushers		
AI0207	1,200	79.97
AI0208	900	76.23
AI0203	750	73.93
AI0204	370	65.41
AI0205	370	65.41
Plant 2 Conveyors		
MJ0201	1,500	82.95
MJ0203	1,500	82.95
MJ0205	1,500	82.95
MJ0207	1,200	79.97
MJ0208	1,200	79.97
MJ0209	1,200	79.97
MJ0210	1,200	79.97
MJ0211	1,200	79.97
MJ0217	1,200	79.97
MJ0202	1,000	77.59
MJ0206	1,000	77.59
MJ0212	1,000	77.59

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Plant 2 Conveyors (Continued)		
MJ0213	1,000	77.59
MJ0214	1,000	77.59
MJ0215	1,000	77.59
MJ0216	1,000	77.59
MJ0218	1,000	77.59
Plant 2 Screens		
MK0202	1,050	78.22
MK0203	1,150	79.41
MK0201	1,245	80.46
MK0204	1,195	79.91
MK0205	1,195	79.91
MK0206	1,195	79.91
MK0207	1,195	79.91
MK0208	1,195	79.91
Plant 2 Feeders		
MK0209	1,200	79.97
MK0214	500	68.96
MK0215	500	68.96

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Eleven's Plant Screen		
AK1404	390	66.02
Eleven's Plant Conveyors		
AJ0921	300	63.00
AJ1418	300	63.00
AJ1419	300	63.00
AJ1420	390	66.02
AJ1421	390	66.02
AJ1422	390	66.02
AJ1423	390	66.02

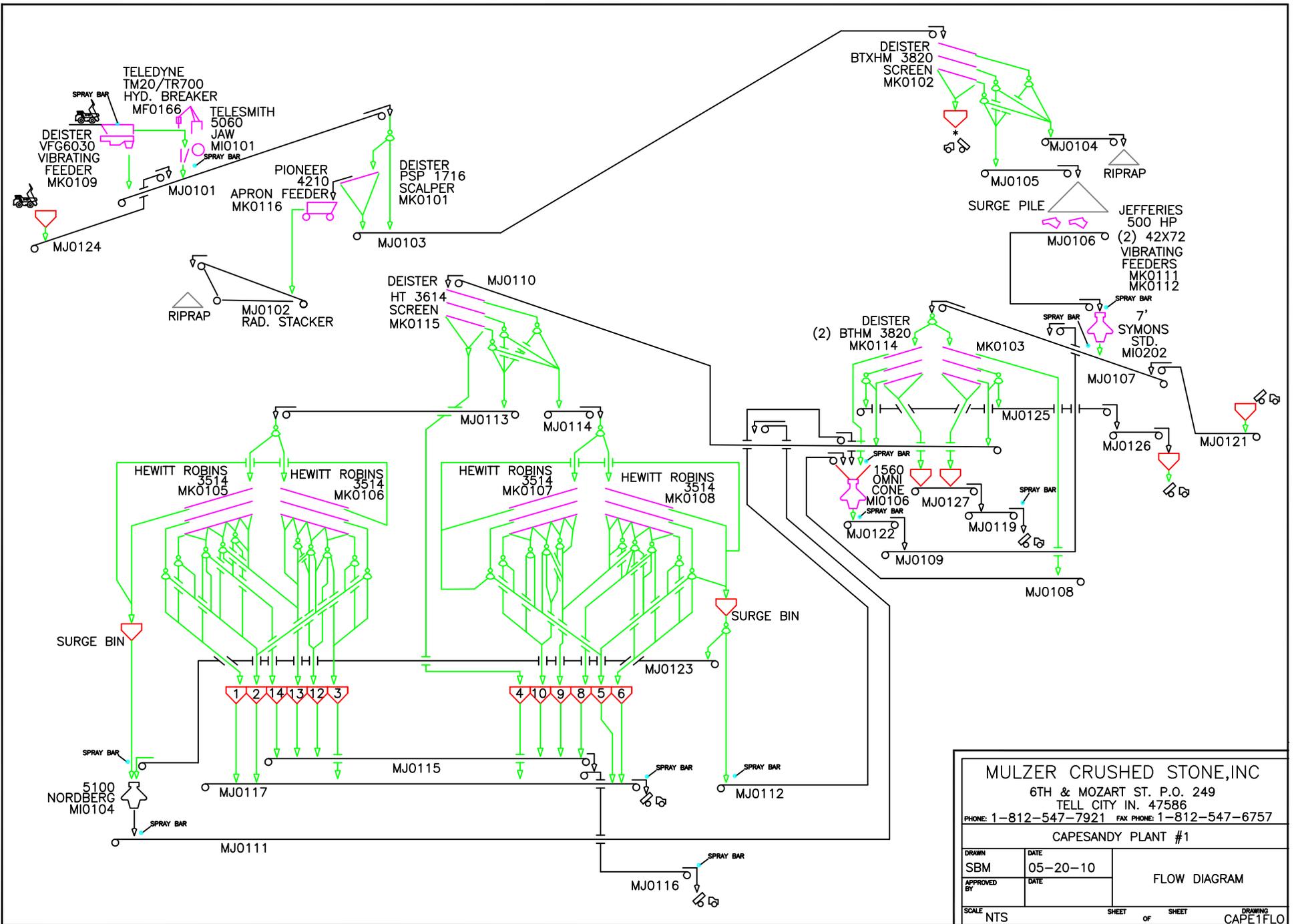
Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Eleven's Plant Conveyors (Continued)		
MJ0128	300	63.00
AJ0943	300	63.00
AJ0945	300	63.00
AJ0946	300	63.00
AJ1409	300	63.00
AJ1411	300	63.00
AJ1424	300	63.00
Eleven's Plant Feeders		
AK1407	300	63.00
AK1405	300	63.00

Process / Emission Unit	P - process weight rate (ton/hr)	E - rate of emission / Limit (lb/hr)
Sand Plant Screen		
MK0306	300	63.00
Sand Plant Conveyors		
MJ0306	300	63.00
MJ0307	300	63.00
MJ0308	300	63.00
MJ0309	300	63.00
MJ0310	300	63.00

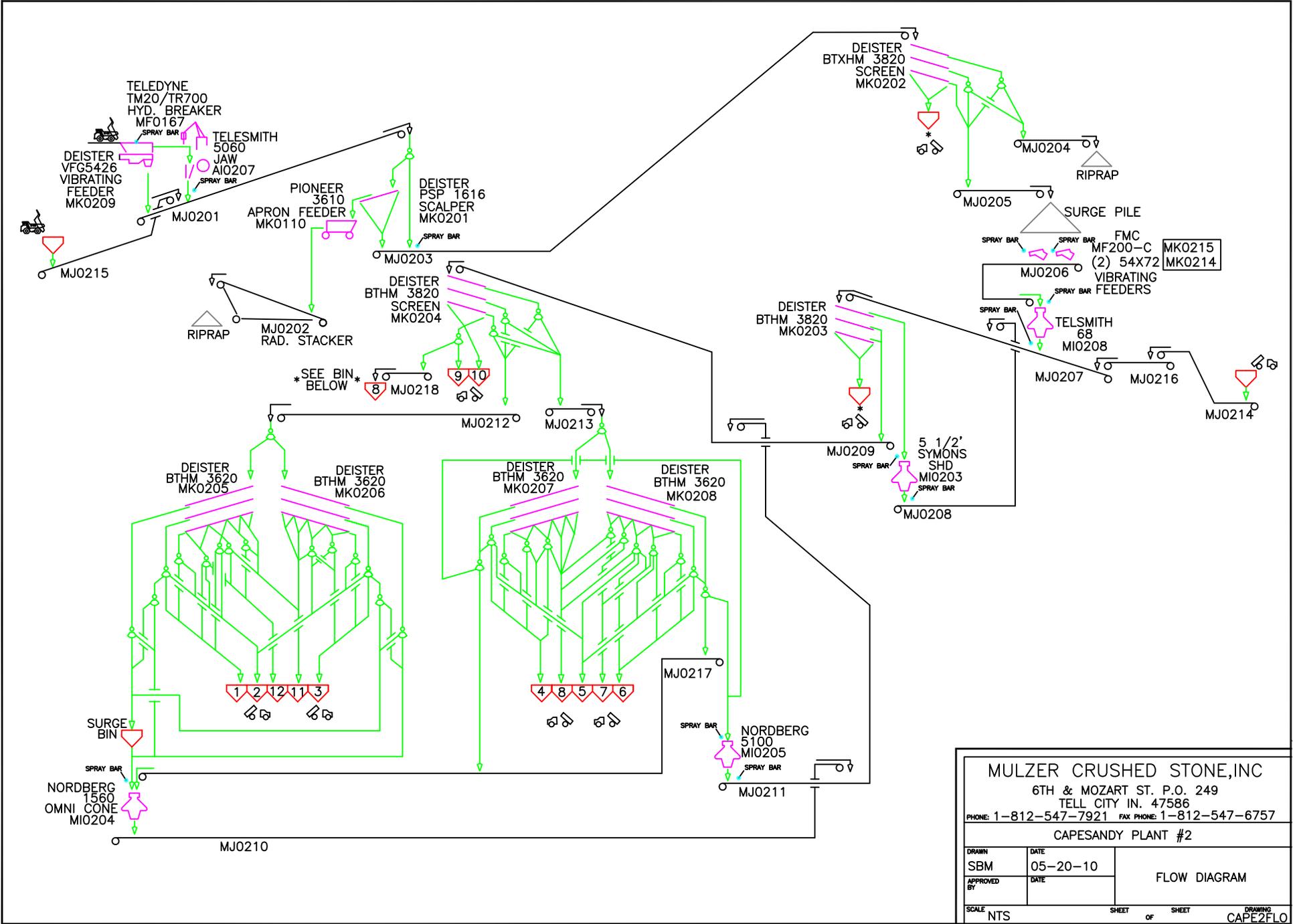
**Indiana Department of Environmental Management
Office of Air Quality**

Appendix B to the Technical Support Document (TSD) for a Part 70 Operating Permit
Renewal

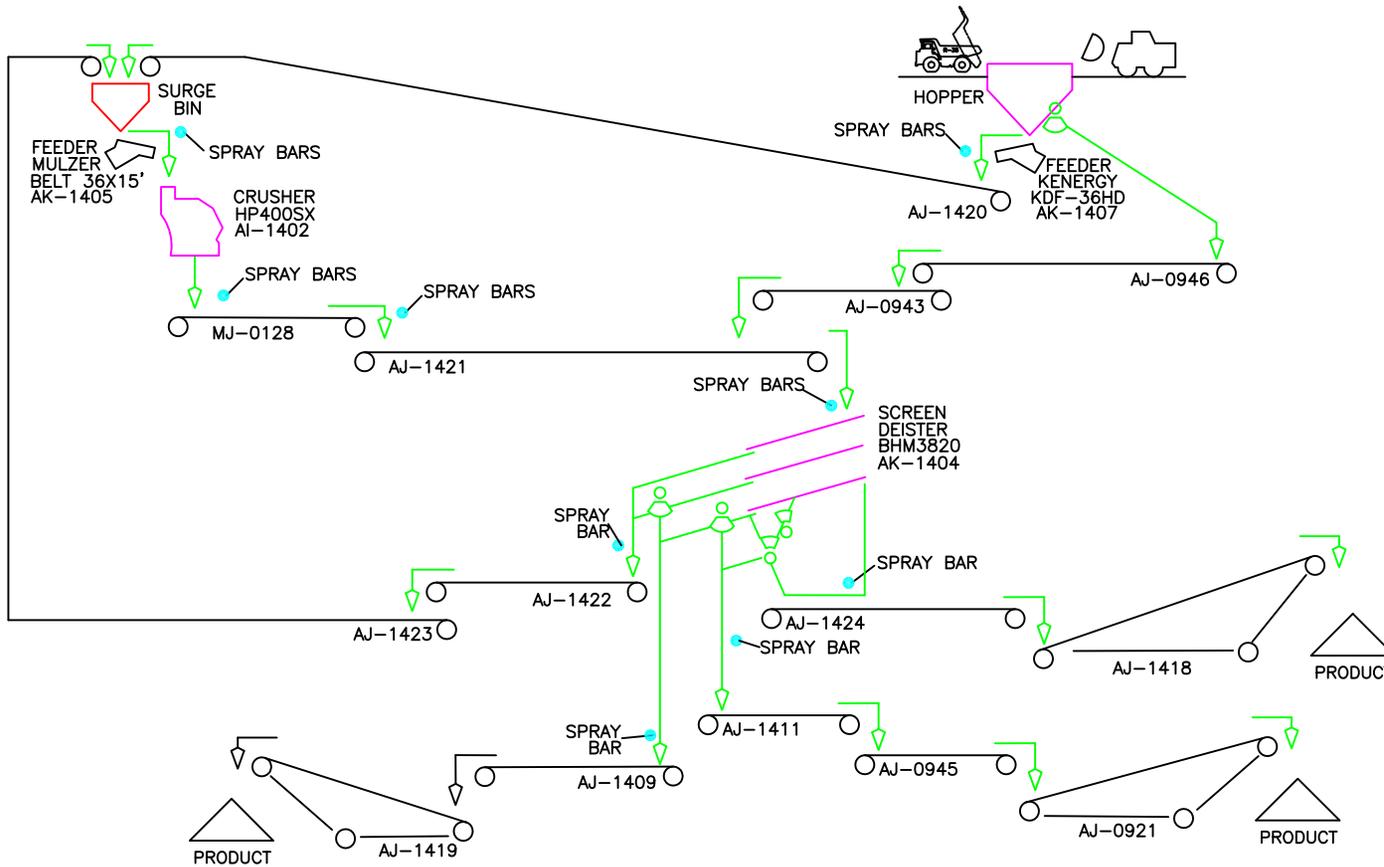
Source Name:	Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Source Location:	19925 S. Alton Fredonia Road, Leavenworth, Indiana 47137
County:	Crawford
SIC Code:	1422
Permit Renewal No.:	T025-29526-00002
Permit Reviewer:	APT



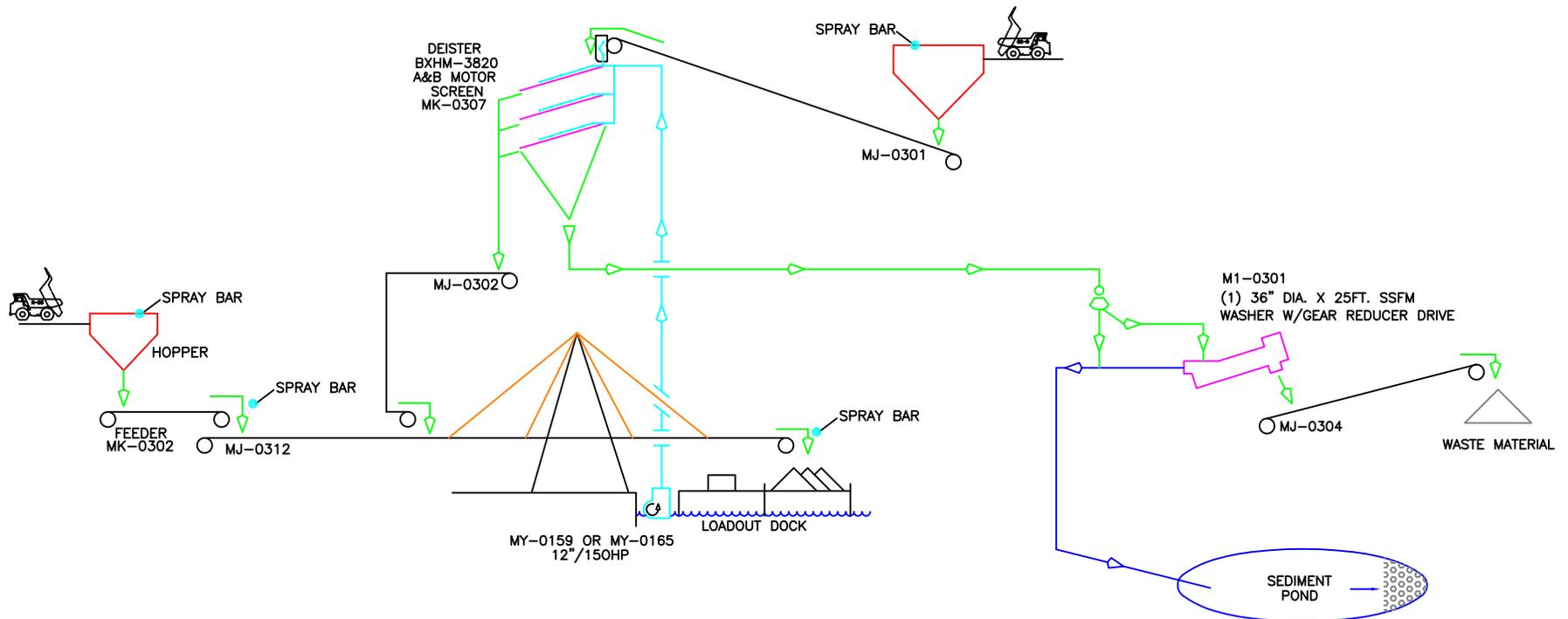
MULZER CRUSHED STONE, INC		
6TH & MOZART ST. P.O. 249 TELL CITY IN. 47586		
PHONE: 1-812-547-7921 FAX PHONE: 1-812-547-6757		
CAPESANDY PLANT #1		
DRAWN SBM	DATE 05-20-10	FLOW DIAGRAM
APPROVED BY	DATE	
SCALE NTS	SHEET OF SHEET	DRAWING CAPE1FLO



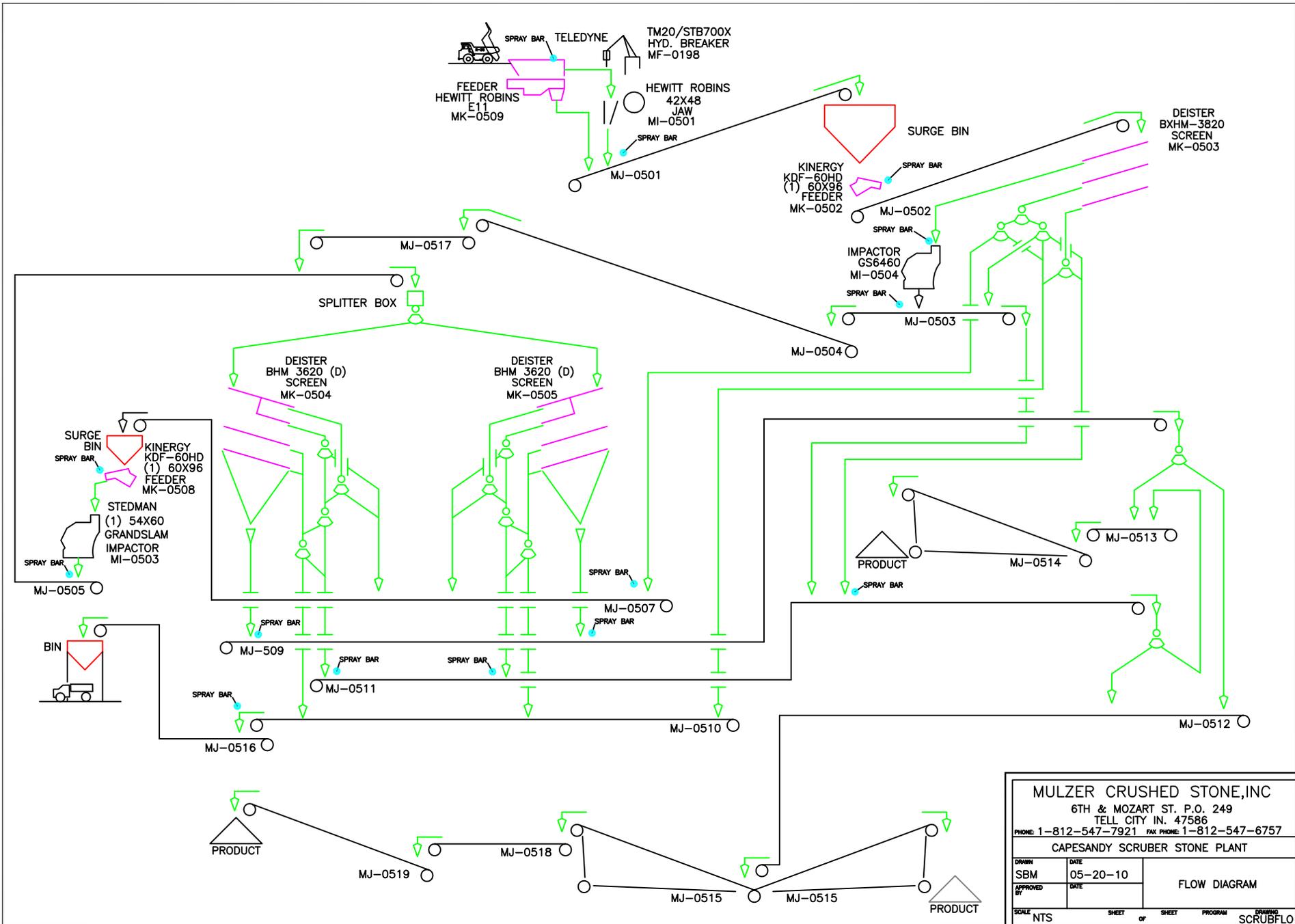
MULZER CRUSHED STONE, INC			
6TH & MOZART ST. P.O. 249 TELL CITY IN. 47586			
PHONE: 1-812-547-7921 FAX PHONE: 1-812-547-6757			
CAPE SANDY PLANT #2			
DRAWN SBM	DATE 05-20-10	FLOW DIAGRAM	
APPROVED BY	DATE		
SCALE NTS		SHEET OF SHEET	DRAWING CAPE2FLO



MULZER CRUSHED STONE, INC 6TH & MOZART ST. P.O. 249 TELL CITY IN. 47586 PHONE: 1-812-547-7921 FAX PHONE: 1-812-547-6757			
CAPE SANDY PORTABLE PLANT			
DRAWN SBM	DATE 05-26-10	FLOW DIAGRAM	
APPROVED BY	DATE		
SCALE NTS	SHEET OF	SHEET	PROGRAM DRAWING



MULZER CRUSHED STONE, INC 6TH & MOZART ST. P.O. 249 TELL CITY IN. 47586 PHONE: 1-812-547-7921 FAX: PHONE: 1-812-547-6757			
CAPE SANDY WASH LOADOUT PLANT			
DRAWN SBM	DATE 05-20-10	FLOW DIAGRAM	
APPROVED BY	DATE		
SCALE NTS	SHEET OF	SHEET	PROGRAM SCRUBFLO



MULZER CRUSHED STONE, INC			
6TH & MOZART ST. P.O. 249 TELL CITY IN. 47586			
PHONE: 1-812-547-7921 FAX: 1-812-547-6757			
CAPESANDY SCRUBBER STONE PLANT			
DRAWN SBM	DATE 05-20-10	FLOW DIAGRAM	
APPROVED BY	DATE		
SCALE NTS	SHEET OF	SHEET	PROGRAM DRAWING SCRUBFLO



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Brian Peters
Mulzer Crushed Stone (Cape Sandy Facility)
534 Mozart Street
Tell City, IN 47586

DATE: December 9, 2011

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

SUBJECT: Final Decision
Part 70 Operating Permit Renewal
025-29526-00002

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Ken Mulzer - President
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
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Thomas W. Easterly
Commissioner

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

December 9, 2011

TO: Crawford County Public Library

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

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

Applicant Name: Mulzer Crushed Stone, Inc. (Cape Sandy Facility)
Permit Number: 025-29526-00002

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 12/9/2011 Mulzer Crushed Stone Inc (Cape Sandy Facility) 025-29526-00002 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Brian Peters Mulzer Crushed Stone Inc (Cape Sandy Facility) 534 Mozart St Tell City IN 47586 (Source CAATS) via confirmed delivery										
2		Ken Mulzer President Mulzer Crushed Stone Inc (Cape Sandy Facility) PO Box 249 Tell City IN 47586 (RO CAATS)										
3		Crawford County Commissioners 316 South Court Street English IN 47118 (Local Official)										
4		Crawford Co Public Library 203 Indiana Ave English IN 47118-0159 (Library)										
5		Crawford County Health Department 306 Oak Hill Circle, P.O. Box 246 English IN 47118-0246 (Health Department)										
6		Leavenworth Town Council P.O. Box 7, 636 West Plaza Drive Leavenworth IN 47137 (Local Official)										
7		Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)										
8		Mark Woods 1300 N. Otts Ln. Milltown IN 47145 (Affected Party)										
9		Art & Gina Hill 3591 N St Rd 66 Milltown IN 47145 (Affected Party)										
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
8			