



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

July 19, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: U.S. Aggregates, Inc. / SSM 089-18804-05256

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

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Commissioner

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July 19, 2004

Mr. Kenneth L. Robinson
U.S. Aggregates Inc.
5400 West 86th Street
Indianapolis, IN 46268

Re: Initial Site Approval
Part 70 SSM 089-18804-05256

Dear Mr. Robinson:

This letter grants approval to construct the portable slag, sand, and aggregates screening, handling and conveying plant as described in Source Modification No. 089-18804-05256, to be initially located at One North Broadway, Gary, Indiana, in Lake County.

A two-week advance notice of start-up is required in order for IDEM to perform an inspection. If the plant is not operating in compliance with all applicable regulations upon inspection, the plant must cease operation upon notification to you by IDEM staff of such non-compliance. Operations may only resume once remedial actions have been taken.

If you have any questions concerning this permit, please contact Ms. Iryn Calilung at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-5692 or toll free at 1-800-451-6027 extension 3-5692 or at icalilun@dem.state.in.us.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

cc: File - Gary County
Lake County Health Department
Northwest Indiana Regional Office
Gary Division of Air Pollution Control
Air Compliance Inspector - Rick Massoels



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 Commissioner

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PART 70 SIGNIFICANT SOURCE MODIFICATION

OFFICE OF AIR QUALITY

**U.S. Aggregates Inc.
 (portable)**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval 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.

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 C, Emergency Provisions.

Source Modification No.: 089-18804-05256	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 19, 2004



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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in Conditions A.1 and A.2 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 approval 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)]

The Permittee owns and operates a portable slag, sand, and aggregates screening, handling, and conveying plant.

Source Name:	U.S. Aggregates, Inc.
Source Location:	(portable)
Source Location (for this permit):	One North Broadway Avenue, Gary, IN 46402
Mailing Address:	5400 West 86 th Street, Indianapolis, IN 46268
Source General Telephone Number:	574/596-6799
Responsible Official:	Vice President of Operations
County:	Lake
SIC Code:	3295 (Steel Mill Slag Sand Screening) 1442 (Sand, Gravel, and Aggregate Screening)
Source Categories:	1 of the 28 source categories Major PSD Source

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

This portable sizing and screening plant with a maximum capacity of 350 tons of slag, sand and aggregates per hour is approved to construct and operate the following emission units and pollution control devices:

- (1) 3-deck sizing screen, identified as Portable SS-1, with dust suppression as particulate control.
- (2) Input hopper, identified as Grizzly Hopper GH-1.
- (3) Input conveyor, identified as CO-1.
- (4) Output conveyor, identified as CO-2.
- (5) One 150 HP diesel fueled generator, identified as E-1.
- (6) One (1) diesel fuel tank with capacity of 78 gallons at a rate of 4 gallons per hour.
- (7) One (1) diesel fuel tank with capacity of 1,000 gallons at a rate of 4 gallons per hour.
- (8) Truck loading, identified as TL-1.
- (9) Aggregate storage pile with storage capacity of 3,000 tons, identified as SP-1.
- (10) Unpaved slag, sand, and aggregates area and roads.

There is no crusher involved in this construction.

A.3 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).

A.4 Major Source Determination

The Office of Air Quality (OAQ) determined that the following plants are considered as one major source:

- | | | |
|-----|----------------------------------|---|
| (1) | US Steel, Gary Works | stationary steel mill
(primary operations) |
| | Plant ID: | 089-00121 |
| | Permanent Source Location: | One North Broadway, Gary, IN |
| (2) | U.S. Aggregates, Inc. | portable aggregate screening plant
(supporting operations) |
| | Plant ID: | 089-05256 |
| | Source Location for this permit: | One North Broadway, Gary, IN. |

SECTION B GENERAL CONSTRUCTION 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 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ) verifying that the portable screening plant was constructed as proposed in the application. This portable screening plant may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the portable screening plant differs from the construction proposed in the application, the Permittee may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter and shall attach it to this document.

B.5 Part 70 Permit Application [326 IAC 2-7-4(a)(1)(A)(ii)]

Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii), the Permittee shall apply for a Part 70 operating permit within twelve (12) months from the initial operation.

For administrative purposes, the Permittee will be issued a separate Part 70 permit.

SECTION C GENERAL OPERATION CONDITIONS

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, 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 Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (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 contributes to any violation.

The submittal of the PMP and the PMP extension does not require the certification by the

“responsible official” as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

C.4 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.5 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

C.6 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

326 IAC 9-1-2 is not federally enforceable

C.7 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.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

C.9 Performance Testing [326 IAC 3-6]

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

approved methods as specified in this permit.

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

C.13 Emergency Provisions [326 IAC 2-7-16]

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

Telephone Number: 1-800-451-6027 (ask for OAQ, Compliance Section)
or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
or
Telephone: 219-757-0265 (Northwest Regional Office)
Toll free: 888-209-8892
Facsimile Number: 219-757-0267

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

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

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

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

- (A) A description of the emergency;

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) 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.

C.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 60 or 40 CFR 63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions.

A CRP shall be submitted to IDEM upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan [or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall

amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan to include such response steps taken.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan [or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan] is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section C-Deviations from Permit

Requirements and Conditions.

- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information 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 kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

- (c) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by

any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

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

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

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

- (b) 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.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Portable Source Requirement

C.18 Relocation of Portable Sources [326 IAC 2-14-4]

- (a) This permit is approved for operation in all areas of Indiana. This determination is based on the requirements of Prevention of Significant Deterioration (PSD) in 326 IAC 2-2, and Emission Offset requirements in 326 IAC 2-3.

- (b) The Permittee shall submit a thirty (30) day advance notice of relocation. The relocation notice shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

This submittal shall include the following:

- (1) A list of governmental officials entitled to receive notice of application to relocate. IC 13-15-3-1
- (2) A list of adjacent landowners that the Permittee will send written notice to not more than ten (10) days after submission of the request to relocate. IC 13-15-8

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee shall obtain a "Relocation Site Approval" letter before relocating.
- (d) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:
 - (1) Madison County - (Anderson Office of Air Management)
 - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)
 - (3) City of Gary - (Gary Division of Air Pollution)
 - (4) City of Hammond - (Hammond Department of Environmental Management)
 - (5) Marion County - (Indianapolis Air Pollution Control Agency)
 - (6) St. Joseph County - (St. Joseph County Health Department)
 - (7) Vigo County - (Vigo County Air Pollution Department)
- (e) The Permittee shall have a valid operation permit, consisting of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

SECTION D FACILITY OPERATION CONDITIONS

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

A portable sizing and screening plant with a maximum capacity of 350 tons of slag, sand and aggregates per hour consisting of the following emission units and pollution control devices:

- (1) 3-deck sizing screen, identified as Portable SS-1, with dust suppression as particulate control.
- (2) Input hopper, identified as Grizzly Hopper GH-1.
- (3) Input conveyor, identified as CO-1.
- (4) Output conveyor, identified as CO-2.
- (5) One 150 HP diesel fueled generator, identified as E-1.
- (6) One (1) diesel fuel tank with capacity of 78 gallons at a rate of 4 gallons per hour.
- (7) One (1) diesel fuel tank with capacity of 1,000 gallons at a rate of 4 gallons per hour.
- (8) Truck loading, identified as TL-1.
- (9) Aggregate storage pile with storage capacity of 3,000 tons, identified as SP-1.
- (10) Unpaved slag, sand, and aggregates area and roads.

There is no crusher involved in this construction.

(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 PSD Minor Limit [326 IAC 2-2]

- (a) Upon the construction of this modification to a major source, the input of slag, sand, and aggregates to be processed shall not exceed 462,371 tons of aggregates per twelve (12) consecutive month period with compliance determined at the end of each month.
 - (1) This slag, sand, and aggregates usage limitation is equivalent to particulate matter (PM) emissions less than 25 tons per year.
 - (2) This slag, sand, and aggregates usage limitation is equivalent to particulate matter with aerodynamic diameter of less than 10 micrometers (PM10) emissions less than 15 tons per year.
 - (3) This slag, sand, and aggregates usage limitation makes the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and 326 IAC 2-3 Emission

Offset not applicable.

- (b) During the first twelve (12) months of operation, the input of slag, sand, and aggregates shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 38,531 total tons per month.

D.2 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from portable plant wide activities shall meet the following requirements (as applicable):

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero percent (0%) frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero percent (0%) frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

D.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this portable screening plant and its emission control devices.

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

D.4 Fugitive Dust Control Plan (FDCP) [326 IAC 6-1]

The Permittee shall control fugitive particulate matter emissions by implementing the Fugitive Dust Control Plan (FDCP), submitted on [April 7, 2004](#).

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

D.5 Visible Emissions Notations

(a) Visible emission notations of the following (as applicable):

- (1) paved road,
- (2) unpaved road,
- (3) batch transfer,
- (4) storage piles,
- (5) inplant transportation of material by truck or rail at any time,
- (6) front end loaders and skip hoists,
- (7) building enclosing all or part of the material processing equipment,
- (8) dust handling equipment, and
- (9) building vents,

shall be performed once per shift during normal daylight operations when this portable screening and handling plant is in operation.

A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan (CRP) for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

D.6 Record Keeping Requirements

- (a) The Permittee shall maintain records of the actual slag, sand, and aggregates processed.
- (b) Pursuant to 326 IAC 8-9-6, the Permittee shall keep records of each vessel for the life of each vessel. The records shall contain the following information:
 - (1) the vessel identification number,
 - (2) the vessel dimensions, and
 - (3) the vessel capacity.
- (c) As applicable, the Permittee shall maintain records of once per shift visible emission notations of the:
 - (1) paved road,
 - (2) unpaved road,
 - (3) batch transfer,
 - (4) storage piles,
 - (5) inplant transportation of material by truck or rail at any time,
 - (6) front end loaders and skip hoists,
 - (7) building enclosing all or part of the material processing equipment,
 - (8) dust handling equipment, and
 - (9) building vents,and make available upon request to IDEM OAQ, and the US EPA.
- (c) The Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan and make available upon request to IDEM OAQ, and the USEPA.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.7 Reporting Requirements

A quarterly summary of the actual slag, sand, and aggregates processed shall be submitted to the addresses 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 month period being reported.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name:	U.S. Aggregates, Inc.
Source Location:	(portable)
Source Location (for this permit):	One North Broadway Avenue, Gary, IN 46402
Mailing Address:	5400 West 86 th Street, Indianapolis, IN 46268
Source General Telephone Number:	574/596-6799
Source Modification No.:	089-18804-05256

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 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:

Date:

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

**PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name:	U.S. Aggregates, Inc.
Source Location:	(portable)
Source Location (for this permit):	One North Broadway Avenue, Gary, IN 46402
Mailing Address:	5400 West 86 th Street, Indianapolis, IN 46268
Source General Telephone Number:	574/596-6799
Source Modification No.:	089-18804-05256

Months: _____ to _____ Year: __

This form consists of 2 pages

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
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:	

Page 2 of 2 of Quarterly Deviation and Compliance Monitoring Report

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:

Telephone:

Attach a signed certification to complete this report.

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

**PART 70 OPERATING PERMIT
QUARTERLY REPORT OF THE SLAG, SAND, AND AGGREGATES LIMITATION**

Source Name: U.S. Aggregates, Inc.
Source Location: (portable)
Source Location (for this permit): One North Broadway Avenue, Gary, IN 46402
Mailing Address: 5400 West 86th Street, Indianapolis, IN 46268
Source General Telephone Number: 574/596-6799
Source Modification No.: 089-18804-05256
Limitation: 462,371 tons of slag, sand, and aggregates per twelve (12) consecutive month period with compliance determined at the end of each month.

Year:

Quarter:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

Form Completed By:

Title/Position:

Date:

Telephone:

Attach a signed certification to complete this report.

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

**Technical Support Document (TSD)
Part 70 Significant Source Modification**

Source Background and Description
--

Source Name:	U.S. Aggregates, Inc.
Source Location:	(portable)
Source Location (for this review):	One North Broadway Avenue, Gary, IN 46402
Mailing Address:	5400 West 86 th Street, Indianapolis, IN 46268
Source General Telephone Number:	574/596-6799
Responsible Official:	Vice President of Operations
County:	Lake
SIC Code:	3295 (Steel Mill Slag Sand Screening) 1442 (Sand, Gravel, and Aggregate Screening)
Source Categories:	One source with US Steel. 1 of the 28 source categories Major PSD Source
Permit No.:	089-18804-05256
Permit Reviewer:	Iryn Calilung 317/233-5692 icalilun@dem.state.in.us

Source Determination

The Office of Air Quality (OAQ) determined that the following three (3) plants are considered as one major source:

- | | | |
|-----|----------------------------------|--|
| (1) | US Steel, Gary Works | existing stationary steel mill
(primary operations) |
| | Plant ID: | 089-00121 |
| | Permanent Source Location: | One North Broadway, Gary, IN |
| (2) | U.S. Aggregates, Inc. | new portable aggregate screening plant
(supporting operations) |
| | Plant ID: | 089-05256 |
| | Source Location for this permit: | One North Broadway, Gary, IN. |
| (3) | Heritage Slag Products | existing portable crushing, screening and conveying
(supporting operations) |
| | Plant ID: | 089-05210 |
| | Current Source Location: | One North Broadway, Gary, IN |

The new portable screening plant is going to locate contiguously with US Steel to screen and size the slag and aggregates from the steel mill plant. Since the portable plant will be locating contiguously with US Steel for the primary reason of processing the slag produced by the plant, the two (2) plants are considered as one source.

There is another portable plant owned by US Aggregates, Inc. that was considered as one source with US Steel. This portable plant is Heritage Slag Products. IDEM decided to provide separate plant identifications and permit numbers for this existing portable plant and the new portable plant for administrative processing of any future modifications or relocation requests from either portable plants.

Proposed Modification

On April 12, 2004, the Office of Air Quality (OAQ) received an application from U.S. Aggregates, Inc. to construct a portable sizing and screening plant with a maximum capacity of 350 tons of slag, sand and aggregates per hour and consisting of the following equipment:

- (1) 3-deck sizing screen, identified as Portable SS-1, with dust suppression as particulate control.
- (2) Input hopper, identified as Grizzly Hopper GH-1.
- (3) Input conveyor, identified as CO-1.
- (4) Output conveyor, identified as CO-2.
- (5) One 150 HP diesel fueled generator, identified as E-1.
- (6) One (1) diesel fuel tank with capacity of 78 gallons at a rate of 4 gallons per hour.
- (7) One (1) diesel fuel tank with capacity of 1,000 gallons at a rate of 4 gallons per hour.
- (8) Truck loading, identified as TL-1.
- (9) Aggregate storage pile with storage capacity of 3,000 tons, identified as SP-1.
- (10) Unpaved slag, sand, and aggregates area and roads.

There is no crusher involved in this construction.

U.S. Aggregates, Inc. re-screens and sizes the steel mill slag, sand and aggregates into specification aggregate sand mostly used for construction and highway paving industry. Slag sand and other sand aggregate absorbs moisture and becomes hard crushed. The process is to vibrate and screen the slag sand aggregates to break up the sand into usable sifted sand.

Emission Calculations

The Office of Air Quality (OAQ) verified the emissions calculations submitted by the applicant to be correct and accurate.

See Appendix A of this TSD (7 pages) for detailed calculations.

Potential to Emit (PTE)

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

Table 1 - - PTE Before Control	
Pollutant	(tons/year)
PM	greater than 250
PM ₁₀	greater than 250
SO ₂	less than 10
NOx	less than 25
VOC	less than 5
CO	less than 25
Single HAP	less than 10
Total HAPs	less than 25

- (1) Particulate Matter with aerodynamic diameter less than or equal to 10 micrometers (PM₁₀)
 For the purposes of determining Part 70 applicability under 326 IAC 2-7 for particulate, PM₁₀, not PM, is the regulated pollutant in consideration.
- (4) Sulfur Dioxide (SO₂), Volatile Organic Compound (VOC) , and Carbon Monoxide (CO)
 The PTE of SO₂, VOC, and CO are less than the exemption levels, specified in 326 IAC 2-1.1.
- (5) Hazardous Air Pollutants (HAPs)
 The PTE 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 HAPs is less than twenty-five (25) tons per year.

Limited Potential to Emit

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Table 2 - - PTE Before Control	
Pollutant	(tons/year)
PM	less than 25
PM ₁₀	less than 15
SO ₂	less than 25
NOx	less than 25
VOC	less than 25
CO	less than 25
Single HAP	less than 10
Total HAPs	less than 25

Permitting Status and Determination

- (1) This is the first air approval for this portable screening plant.
- (2) US Aggregates, Inc. is considered as one major source with US Steel. Based on this determination, the proposed construction and operation of this portable screening plant will be considered as a PSD minor modification to an existing major source.
- (3) The proposed construction and operation of this portable screening plant is performed pursuant to 326 IAC 2-7-10.5(f)(4), because the potential to emit before controls for PM and PM₁₀ of this modification exceeds twenty five (25) tons per year.
- (4) Since the Part 70 Operating Permit for US Steel has not been issued yet, this approval will allow US Aggregates, Inc. to construct and operate.
- (5) US Aggregates Inc. has to submit a Part 70 permit application within 12 months after the initial startup of their operation.

County Attainment Status

The portable source is going to initially locate in Lake County.

Pollutant	Status
PM ₁₀	Attainment
SO ₂	Nonattainment
NO ₂	Attainment
Ozone	Nonattainment
CO	Attainment
Lead	Attainment

- (1) Volatile Organic Compound (VOC) and Ozone
VOC are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (2) Sulfur Dioxide (SO₂)
Lake County has been classified as nonattainment for SO₂. Therefore, SO₂ emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (3) Particulate Matter with aerodynamic diameter less than or equal to 10 micrometers (PM₁₀), Nitrogen Oxides (NO_x) and Carbon Monoxide (CO)
Lake County has been classified as attainment or unclassifiable for PM₁₀, NO_x and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) 326 IAC 2-2.

Portable Source

- (1) **Initial Location**
This is a portable slag, sand and aggregates screening, handling and conveying source and its initial location is One North Broadway, Gary, Indiana 46402.
- (2) **Prevention of Significant Deterioration (PSD) and Emission Offset Requirements**
The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, and Emission Offset, 326 IAC 2-3.
- (3) **Fugitive Emissions**
Since US Aggregates, Inc. is considered as one source with U.S. Steel, which is one of the twenty-eight (28) listed sources under 326 IAC 2-2-1(y)(1), the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.
- (4) **Local Agency**
Even though there is a local agency in the area (City of Gary, Division of Air Pollution Control), the Office of Air Quality (OAQ) has the authority to issue this significant source modification.

Federal Rule Applicability

- (1) **New Source Performance Standard (NSPS)**
 - (a) This portable screening operation of slag is not subject to the requirements of the New Source Performance Standard (NSPS), 40 CFR 60.670 through 60.676, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) since the slag material being crushed is not a nonmetallic mineral pursuant to 40 CFR 60.671.
 - (b) This portable screening operation of slag is not subject to the requirements of the New Source Performance Standard, 40 CFR 60.380 through 60.686, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) since the operations are not producing metallic mineral concentrates from ore. None of these slag/aggregates screening operations are performed in a mine or pit.
 - (c) The two (2) storage tanks, with capacities of 78 and 1,000 gallons of diesel fuel are not subject to 40 CFR 60.110b, Subpart Kb since their capacities are less than 40 cubic meters.
- (2) **National Emission Standards for Hazardous Air Pollutants (NESHAPs)**
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 63) applicable to this portable screening plant.

State Rule Applicability

- (1) 326 IAC 1-6-3 and 326 IAC 2-7-5(13) (Preventive Maintenance Plan (PMP))
 PMP is required for the screening and conveying operations.
- (2) 326 IAC 2-2 Prevention of Significant Deterioration (PSD)
 - (a) The emissions after control of particulate matter (PM) and particulate matter with aerodynamic diameter of less than or equal to 10 micrometers (PM₁₀) are limited to less than 25 tons/year and 15 tons/year, respectively; therefore the PSD requirements do not apply.

Table 4 - - PM PTE Calculations			
Operations	(i) PTE Before Control/Limits (tons/year)	(ii) PTE After Control (tons/year)	(iii) PTE After Control/Limits (tons/year)
Slag, Sand and Aggregates Screening and Handling	334.89	149.53	22.55
Insignificant Activities	1.45	1.45	1.45
TOTAL	336.34	150.98	less than 25
<p>(i) The PTE before control was determined at the maximum rate of 350 tons/hour of slag, sand, and aggregates and 8760 hours/year of operation. (see Appendix A for details)</p> <p>(ii) The PTE after control was determined at the maximum rate of 350 tons/hour of slag, sand, and aggregates and 8760 hours/year of operation and applying applicable control measures. (see Appendix A for details).</p> <p>(iii) Since the PTE after control are greater than the PSD significant levels, throughput limitations have to be specified.</p> <p style="text-align: center;">Throughput Limit = $\frac{(350 \text{ tons/hour}) \cdot (8760 \text{ hours/year}) \cdot (22.55 \text{ tons/year})}{(149.45 \text{ tons/year})}$ = 462,371 tons/year of slag, sand, and aggregates</p> <p>This throughput limitation will also make the PM10 emissions less than the PSD significant level.</p>			

- (b) The carbon monoxide (CO) potential to emit (PTE) are less than 100 tons/year; therefore the PSD requirements do not apply.
- (c) The nitrogen oxides (NOx) PTE are less than 40 tons/year; therefore the PSD requirements do not apply.

- (3) 326 IAC 2-3 Emission Offset (EO)
 - (a) The VOC PTE are less than 25 tons/year; therefore the EO requirements do not apply.
 - (b) The SO₂ PTE are less than 40 tons/year; therefore the EO requirements do not apply.
- (4) 326 IAC 2-6 (Annual Emission Reporting)

This portable plant is subject to the annual emission statement requirement because it is considered as one source with US Steel.
- (5) 326 IAC 2-7 (Part 70)

This portable screening plant is subject to the Part 70 Operating permit program because it is considered as one source with US Steel.
- (6) 326 IAC 5-1 (Opacity)

This portable source, based on its initial location is subject to the opacity limit of 20% in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (7) 326 IAC 6-1-1 (Nonattainment Area Limitations)

In order for this portable screening plant to re-locate to any nonattainment county designated by 326 IAC 6-1-7, the portable plant shall meet the allowable PM emission limitation pursuant to 326 IAC 6-1-2 (a) of 0.03 grains per standard dry cubic feet per minute.
- (8) 326 IAC 6-1-10.1 (Lake County PM₁₀ Emissions Requirements)

Although U.S. Steel is one of the sources listed in 326 IAC 6-1-10.1(d), none of the facilities associated with this portable screening plant are specifically cited, therefore this rule does not apply to the U.S. Aggregates facilities.
- (9) 326 IAC 6-1-10.2 (Lake County PM₁₀ Coke Battery)

This rule does not apply because this portable screening plant does not have a coke battery.
- (10) 326 IAC 6-1-11.1 (Lake County Fugitive PM Control)

This rule applies to this portable plant because it has operations with potential to emit of 5 tons/year of fugitive. Compliance with this rule is going to be achieved by controlling fugitive particulate matter emissions according to the plan submitted by US Aggregates, Inc. on April 7, 2004.
- (11) 326 IAC 6-1-11.2 (Lake County PM Contingency Measures)

US Aggregates, Inc. is subject to this rule because it has potential PM₁₀ emissions equal to or greater than 10 tons/year. Pursuant to this rule, the source has to implement a reduction measure plan within 180 days of IDEM's initial notification.
- (12) 326 IAC 6-2 (Particulate Emissions Limitations for Indirect Heating)

This rule does not apply because there is no boiler at this portable plant.
- (13) 326 IAC 6-3

This rule does not apply because PM limits are already established under 326 IAC 6-1.
- (14) 326 IAC 6-4 (Fugitive Dust Emissions)

Fugitive dust from this plant shall not escape beyond the property line or boundaries of the property, right of way, or easement on which the plant is located.

- (15) 326 IAC 7-1.1 (SO₂)
This rule does not apply because the SO₂ PTE are less than 25 tons/year.
- (16) 326 IAC 7-4-1.1 (Lake County SO₂)
This rule does not apply because the SO₂ PTE are less than 25 tons/year.
- (17) 326 IAC 8 (VOC Rules)
Even though the plant is located in Lake County, 326 IAC 8 rules do not apply because:
 - (a) the VOC potential to emit is less than the applicability levels of 100 tons/year, 25 tons/year and 10 tons/year. The actual VOC emissions are also less than 15 lbs/day.
 - (b) no wood surface coating is performed in the plant,
 - (c) no automobile refinishing is performed in the plant,
 - (d) no shipbuilding or ship repair is performed in the plant, and
 - (e) there is no sintering process in the plant.
- (18) 326 IAC 8-9-6 (VOL Storage Vessels)
This rule applies to the diesel fuel tanks because the tanks are going to be located in Lake County, however, since the capacity is less than 39,000 gallons, only the record keeping and reporting requirements apply.
- (19) 326 IAC 9-1 (CO)
This rule does not apply because this portable plant does not contain the specific operations regulated under 326 IAC 9.
- (20) 326 IAC 10-1-1 (NO_x Control in Clark and Floyd Counties)
This rule does not apply because this plant is not located in Clark or Floyd County.
- (21) 326 IAC 10-3 (NO_x Reduction Program for Specific Source Categories)
This rule does not apply because this portable plant is not one of the specific listed source categories.
- (22) 326 IAC 10-4-1 (NO_x Budget Trading Program)
This rule does not apply because there is no electricity-generating unit in this plant.
- (23) 326 IAC 11 (Specific Types of Operations)
These rules do not apply because this screening operation is not one of the listed specific types of operations.

Recommendation and Conclusion

(1) Based on the facts, conditions and evaluations made, the OAQ staff recommends to the IDEM Commissioner that the operation of the finishing plant be made available to the public and interested parties for review.

(2) 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 April 12, 2004.

(3) The applicant has provided a copy of the application to the City of Gary Public Library, 220 W. 5th Avenue, Gary, IN 46403.

(4) The applicant has notified the following government officials:

(a) Mayor of Gary,

(b) President of City of Gary Common Council, and

(c) Lake County Commissioners

(5) The operation of this finishing plant shall be subject to the conditions of the attached proposed permit No. 089-18804-05256.

IDEM Contact

Questions regarding this proposed approval can be directed to Iryn Calilung at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-5692 or toll free at 1-800-451-6027 extension 3-5692 or at icalilun@dem.state.in.us.

Appendix A: Emission Calculations

Slag Processing
 Company Name: **U.S. Aggregates Inc. (portable)**
 Address City IN Zip: **1 North Broadway, Gary Indiana 46402**
 SSM: **089-18804**
 Plt ID: **089-05256**
 Reviewer: **Iryn Calilung**
317/233-5692 icalilun@dem.state.in.us

**** TSP Emissions Before Controls ****

Storage	** see page 2 for details **				0.16 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting	** see page 3 for details **				275.40 tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloading	350 ton/hr x	0.0043 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	6.54 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Screening	350 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	48.29 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	350 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	4.51 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:					334.89 tons/yr	

**** TSP Emissions After Controls ****

Storage	0.16 tons/yr x	10% emitted after controls =	0.02 tons/yr
Transporting	275.40 tons/yr x	50% emitted after controls =	137.70 tons/yr
Loading & Unloading	6.54 tons/yr x	100% emitted after controls =	6.54 tons/yr
Screening	48.29 tons/yr x	10% emitted after controls =	4.83 tons/yr
Conveying	4.51 tons/yr x	10% emitted after controls =	0.45 tons/yr
Total emissions after controls:			149.53 tons/yr

** Contolled Emissions (fugitive vs. nonfugitive) **

Storage	0.16 tons/yr x	10% emitted after controls =	0.02 tons/yr
Transporting	275.40 tons/yr x	50% emitted after controls =	137.70 tons/yr
Loading / Unloading	6.54 tons/yr x	100% emitted after controls =	6.54 tons/yr
Total fugitive emissions:			144.25 tons/yr
Screening	48.29 tons/yr x	10% emitted after controls =	4.83 tons/yr
Conveying:	4.51 tons/yr x	10% emitted after controls =	0.45 tons/yr
Total nonfugitive emissions:			5.280 tons/yr

** TSP Emissions From Storage **

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

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

$$= 7.72 \text{ lb/acre/day}$$

- where s = 4 % silt content of material
- p = 125 days of rain greater than or equal to 0.01 inches
- f = 25 % of wind greater than or equal to 12 mph

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

$$= \mathbf{0.16} \text{ tons/yr}$$

where sc = 3 ,000 tons storage capacity Finished Product Only

** TSP Emissions from Unpaved Roads **

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98). Two methods are provided for calculating emissions. The first does not consider natural mitigation due to precipitation.

$$20.00 \text{ trip/hr} \times 0.5 \text{ mile/trip} \times 2 \text{ (round trip)} \times 8760 \text{ hr/yr} = 175200 \text{ miles per year}$$

Method 1: $E_f = k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c]$
 = 4.78 lb/mile

where k = 10 for PM-10 (k=10 for PM-30 or TSP)
 s = 4 mean % silt content of unpaved roads
 b = 0.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP)
 c = 0.4 Constant for PM-10 (c = 0.4 for PM-30 or TSP)
 W = 30.00 tons average vehicle weight
 M = 2.5 surface material moisture content, % (default is 0.2 for dry condition)

$$\frac{4.78 \text{ lb/mi} \times 175200 \text{ mi/yr}}{2000 \text{ lb/ton}} = 418.84 \text{ tons/yr}$$

This method has a lower quality rating than Method 1.

Method 2: $E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c] \} \cdot [(365-p)/365]$
 = 3.14 lb/mile

(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
 where k = 10
 s = 4 mean % silt content of unpaved roads
 b = 0.5 Constant for PM-10 (b = 0.5 for PM-30 or TSP)
 c = 0.4 Constant for PM-10 (c = 0.4 for PM-30 or TSP)
 W = 30.00 tons average vehicle weight
 Mdry = 2.5 surface material moisture content, % (default is 0.2 for dry condition) number of days with at least 0.254mm of precipitation (See Figure 13.2.2.1)
 p = 125

$$\frac{3.14 \text{ lb/mi} \times 175200 \text{ mi/yr}}{2000 \text{ lb/ton}} = 275.40 \text{ tons/yr}$$

** TSP Emissions from Aggregate Handling **

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

$$E_f = k \cdot (0.0032)^{0.74} \cdot (U/5)^{1.3} / (M/2)^{1.4}$$

= 0.0043 lb/ton

where k = 0.74 (particle size multiplier)
 U = 10 mile/hr mean wind speed
 M = 2.5 % material moisture content

**** PM10 Emissions Before Controls ****

Storage	** see page 5 for details **				1.86 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)
Transporting	** see page 6 for details **				73.22 tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)
Loading & Unloading	350 ton/hr x	0.0020 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.09 tons/yr	AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Crushing (primary)	0 ton/hr x	0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)	0 ton/hr x	0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)	0 ton/hr x	0.0024 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening	350 ton/hr x	0.015 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	23.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer	350 ton/hr x	0.0014 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.15 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:					103.32 tons/yr	

**** PM10 Emissions After Controls ****

Storage	1.86 tons/yr x	10% emitted after controls =	0.19 tons/yr
Transporting	73.22 tons/yr x	50% emitted after controls =	36.61 tons/yr
Loading & Unloading	3.09 tons/yr x	100% emitted after controls =	3.09 tons/yr
Crushing (primary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening	23.00 tons/yr x	10% emitted after controls =	2.30 tons/yr
Conveying	2.15 tons/yr x	10% emitted after controls =	0.21 tons/yr
Total emissions after controls:			42.40 tons/yr

** PM 10 Controlled Emissions (fugitive vs. nonfugitive) **

Storage	1.86 tons/yr x	10% emitted after controls =	0.19 tons/yr
Transporting	73.22 tons/yr x	50% emitted after controls =	36.61 tons/yr
Loading / Unloading	3.09 tons/yr x	100% emitted after controls =	3.09 tons/yr
Total fugitive emissions:			39.89 tons/yr
Crushing (primary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (secondary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening	23.00 tons/yr x	10% emitted after controls =	2.30 tons/yr
Conveying:	2.15 tons/yr x	10% emitted after controls =	0.21 tons/yr
Total nonfugitive emissions:			2.514 tons/yr

** PM10 Emissions from Storage **

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

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

$$= 9.26 \text{ lb/acre/day}$$

where s = 8 % silt content of material

p = 125 days of rain greater than or equal to 0.01 inches

f = 15 % of wind greater than or equal to 12 mph

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

$$= 1.86 \text{ tons/yr}$$

where sc = 30 ,000 tons storage capacity Finished Product Only

** PM10 Emissions from Unpaved Roads **

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98). Two methods are provided for calculating emissions. The first does not consider natural mitigation due to precipitation.

20.00 trip/hr x (ASSUME 400 TONS PER HOUR ALL TRUCKS)
 0.5 mile/trip x
 2 (round trip) x
 8760 hr/yr = 175200 miles per year

This method has a lower quality rating than Method 1.

Method 1: $E_f = k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c]$
 = 1.27 lb/mile

where k = 2.6 for PM-10 (k=10 for PM-30 or TSP)

s = 4 mean % silt content of unpaved roads

b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)

c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)

W = 30.00 tons average vehicle weight

M = 2.5 surface material moisture content, % (default is 0.2 for dry condition)

$\frac{1.27 \text{ lb/mi} \times 175200 \text{ mi/yr}}{2000 \text{ lb/ton}} = 111.35 \text{ tons/yr}$

Method 2: $E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c] \cdot [(365-p)/365]$
 = 0.84 lb/mile

(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
 where k = 2.6 10) (k=10 for PM-30 or TSP)
 mean % silt content of unpaved roads

s = 4 roads

Constant for PM-10 (b = 0.5 for PM-30 or TSP)

b = 0.4 Constant for PM-10 (c = 0.4 for PM-30 or TSP)

c = 0.3 PM-30 or TSP
 W = 30.00 tons average vehicle weight
 surface material moisture content, % (default is 0.2 for dry conditions)

Mdry = 2.5 number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)

p = 125

$\frac{0.84 \text{ lb/mi} \times 175200 \text{ mi/yr}}{2000 \text{ lb/ton}} = 73.22 \text{ tons/yr}$

** PM10 Emissions from Aggregate Handling **

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

$E_f = k \cdot (0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$
 = 0.0020 lb/ton

where k = 0.35 (particle size multiplier)

U = 10 mile/hr mean wind speed

M = 2.5 % material moisture content

Emissions from the Diesel Fueled Generator

Heat Input Capacity Potential Throughput
 Horsepower (hp) hp-hr/yr

150.0 1314000.0

Emission Factor in lb/hp-hr	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	1.45	1.45	1.35	20.4	1.65	4.39

Methodology

Potential Throughput (hp-hr/yr) = hp * 8760 hr/yr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

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

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.