

**NEW SOURCE CONSTRUCTION PERMIT and
SOURCE SPECIFIC OPERATING AGREEMENT (SSOA)
OFFICE OF AIR MANAGEMENT**

**U. S. Aggregates, Inc.
Portable Source
Initial Location: 14977 River Road
Noblesville, Indiana 4655**

(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 permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1, 326 IAC 2-9, and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP/SSOA 057-11654-00055	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary
- A.3 SSOA Applicability [326 IAC 2-9-1]

B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Modification to Permit [326 IAC 2]
- B.6 Source Specific Operating Agreement Program [326 IAC 2-9]
- B.7 NSPS Reporting Requirements

C SOURCE OPERATION CONDITIONS

- C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-9]
- C.2 Preventive Maintenance Plan [326 IAC 1-6-3]
- C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]
- C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]
- C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- C.6 Permit Revocation [326 IAC 2-1-9]
- C.7 Fugitive Dust Emissions [326 IAC 6-4] [326 IAC 2-9-7(b)(4)(G)]

Testing Requirements

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

Compliance Monitoring Requirements

- C.9 Monitoring Methods [326 IAC 3]
- C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements

- C.11 Malfunctions Report [326 IAC 1-6-2]
- C.12 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]
- C.13 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

Portable Source Requirements

- C.15 Relocation of Portable Sources [326 IAC 2-14-4] [326 IAC 2-6.1-6(d)(2)]
- C.16 Portable Source: Multiple Operations [326 IAC 2-8-11.1] [326 IAC 2-9-7]

D.1 EMISSIONS UNIT OPERATION CONDITIONS - Sand & Gravel Processing Plant

Emission Limitations and Standards

- D.1 Particulate Matter (PM) Limit [326 IAC 2-9-7]
- D.2 Number of Facilities [326 IAC 2-9-7]
- D.3 Annual Throughput Limit [326 IAC 2-9-7]
- D.4 Opacity Limits [326 IAC 2-9-7][326 IAC 12][40 CFR 60.670, Subpart OOO][326 IAC 5-1]
- D.5 Fugitive Particulate Matter Control [326 IAC 2-9-7]
- D.6 Non-Attainment Area Particulate Matter (PM) [326 IAC 6-1]
- D.7 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.8 Dust Suppression for Crushing, Screening and Conveying Operations [326 IAC 2-9-7]

- D.9 Particulate Matter [326 IAC 2-9-7]
- D.10 Testing Requirements [326 IAC 3-6] [40 CFR Part 60.670, Subpart OOO]

Record Keeping and Reporting Requirements

- D.11 Record Keeping Requirements [326 IAC 2-9-7]
- D.12 Annual Notice [326 IAC 2-9-7]
- D.13 Exceedance Reporting Requirements [326 IAC 2-9-1(h)]

Annual Notification & Certification Form

Malfunction Report Form

Affidavit of Construction

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a portable sand and gravel processing plant.

Authorized individual: Kenneth L. Robinson
Initial Address: 14977 River Road, Noblesville, Indiana 46060 (Portable)
Mailing Address: 5400 W. 86th Street, Indianapolis, Indiana 46268
Phone Number: 317-875-4670 (Corporate Environmental: Douglas A. Lozier)
317-773-6811 (on site)
SIC Code: 1442
Initial Location: Hamilton County
County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit (MSOP/SSOA)
Minor Source, under Emission Offset Rules (Portable Plant);
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This portable source is approved to construct and operate one (1) portable sand and gravel processing plant with a maximum throughput rate of 400 tons per hour, including the following equipment and control devices:

- (a) One (1) grizzly hopper, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (b) One (1) primary dry screen / vibrating scalping screen, capacity: four hundred fifty (450) tons of sand and/or gravel per hour.
- (c) One (1) primary crusher (jaw crusher), capacity: fifty (50) tons of gravel per hour.
- (d) One (1) wash screen / desanding vibrating screen, with water slurry, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (e) One (1) sand screw, capacity: one hundred (100) tons of sand and/or gravel per hour.
- (f) One (1) log washer, capacity: two hundred ninety (290) tons of sand and/or gravel per hour.
- (g) One (1) wash screen / sizing screen, with water slurry, capacity: two hundred ninety-five (295) tons of sand and/or gravel per hour.
- (h) One (1) secondary crusher (roll crusher), capacity: seventy-five (75) tons of gravel per hour.
- (i) One (1) conveying operation, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (j) One (1) no. 2 diesel fuel storage tank, identified as T-1, capacity: 10,000 gallons.

A.3 SSOA Applicability [326 IAC 2-9-1]

This portable source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Source Specific Operating Agreement (SSOA).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

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, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

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

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

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

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the section B condition entitled "Source Specific Operating Agreement", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Source Specific Operating Agreement [326 IAC 2-9]

This document shall also become a source specific operating agreement pursuant to 326 IAC 2-9-1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

B.7 NSPS Reporting Requirements

Pursuant to the New Source Performance Standards (NSPS), Part 60.670 - 60.676, Subpart OOO, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-9]

- (a) The total source potential to emit particulate matter after control is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Pursuant to 326 IAC 2-9-7((b)(2), this source does not emit particulate matter in excess of or equal to twenty-five (25) tons per year excluding fugitive emissions.

C.2 Preventive Maintenance Plan [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 (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 (Minor Source Operating Permit Program: Permit Revisions) 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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

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, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to 326 IAC 2-6.1-6(d)(3):

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

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

C.7 Fugitive Dust Emissions [326 IAC 6-4] [326 IAC 2-9-7(b)(4)(G)]

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.

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

C.8 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, OAM.

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 Management
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 submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements

C.9 Monitoring Methods [326 IAC 3]

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, or other approved methods as specified in this permit.

C.10 Actions Related to Noncompliance Demonstrated by a Compliance Test

- (a) When the results of a compliance test exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant compliance tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.11 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.12 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.13 General Record Keeping Requirements [326 IAC 2-6.1-2]

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- (a) Records of all required monitoring data 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 and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
- (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.
- C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
- (a) Any 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 Management
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, OAM, on or before the date it is due.

- (c) Unless otherwise specified in this permit, any annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.

Portable Source Requirements

C.15 Relocation of Portable Sources [326 IAC 2-14-4] [326 IAC 2-6.1-6(d)(2)]

- (a) This permit is approved for operation in all areas of Indiana. This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2 and 40 CFR 52.21, and Emission Offset requirements in 326 IAC 2-3.
- (b) A thirty (30) day advance notice of relocation must be given to IDEM, OAM, and a "Relocation Site Approval" letter must be obtained before relocating.
- (c) 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)
- (d) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

C.16 Portable Source: Multiple Operations [326 IAC 2-8-11.1] [326 IAC 2-9-7]

- (a) In such situations when the subject portable sand and gravel operation needs to operate at the same location as another operation which has been issued a Federally Enforceable State Operating Permit (FESOP), the Permittee shall apply for a minor FESOP revision and receive an approval under 326 IAC 2-8-11.1 to incorporate the subject portable operation into the FESOP, prior to its operation. In that event, both operations shall comply with the FESOP.
- (b) In such situations when the subject portable sand and gravel operation needs to operate at the same location as another sand and gravel operation which has been issued a SSOA, both operations shall operate under the SSOA that allows for the greater number of pieces of equipment and greater annual throughput. No further notification is required in this event.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

One (1) portable crushed/washed sand and gravel processing source consisting of:

- (a) One (1) grizzly hopper, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (b) One (1) primary dry screen / vibrating scalping screen, capacity: four hundred fifty (450) tons of sand and/or gravel per hour.
- (c) One (1) primary crusher (jaw crusher), capacity: fifty (50) tons of gravel per hour.
- (d) One (1) wash screen / desanding vibrating screen, with water slurry, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (e) One (1) sand screw, capacity: one hundred (100) tons of sand and/or gravel per hour.
- (f) One (1) log washer, capacity: two hundred ninety (290) tons of sand and/or gravel per hour.
- (g) One (1) wash screen / sizing screen, with water slurry, capacity: two hundred ninety-five (295) tons of sand and/or gravel per hour.
- (h) One (1) secondary crusher (roll crusher), capacity: seventy-five (75) tons of gravel per hour.
- (i) One (1) conveying operation, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (j) One (1) no. 2 diesel fuel storage tank, identified as T-1, capacity: 10,000 gallons.

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

Emission Limitations and Standards

D.1 Particulate Matter (PM) Limit [326 IAC 2-9-7]

The sand and gravel operation shall not emit particulate matter in excess or equal to twenty-five (25) tons per year, excluding fugitive particulate emissions.

D.2 Number of Facilities [326 IAC 2-9-7]

Pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants), the source shall utilize at most nine (9) crushers, twenty (20) screens, and a conveying operation.

D.3 Annual Throughput Limit [326 IAC 2-9-7]

The sand and gravel operation annual throughput shall be less than one million (1,000,000) tons per year.

D.4 Opacity Limits [326 IAC 2-9-7] [326 IAC 12] [40 CFR 60.670, Subpart OOO] [326 IAC 5-1]

(a) Pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants), 326 IAC 12 (New Source Performance Standards), and 40 CFR 60.672 (Standards of Performance for Nonmetallic Mineral Processing Plants, Standard for Particulate Matter), visible emissions shall comply with the following standards:

- (1) The visible emissions from the screening and conveying operations shall not exceed an average of ten (10%) opacity in twenty-four (24) consecutive

readings in a six (6) minute period. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (2) The visible emissions from the crushing operation shall not exceed an average of fifteen percent (15%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.
- (b) Pursuant to 40 CFR 60.672(h) (Standards of Performance for Nonmetallic Mineral Processing Plants, Standard for Particulate Matter), no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:
- (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.
 - (2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.
- (c) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity for any facilities not covered by NSPS Subpart OOO or by the Source Specific Operating Agreement for sand and gravel plants shall meet the following:
- (1) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) 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.

D.5 Fugitive Particulate Matter Control [326 IAC 2-9-7]

- (a) Fugitive particulate matter (PM) emissions shall be controlled by applying water on storage piles and unpaved roadways on an "as needed" basis, such that the following visible emission conditions are met:
- (1) The visible emissions from any storage pile shall not exceed twenty percent (20%) in twenty-four (24) consecutive readings in a six (6) minute period. This limitation shall not apply during periods when application of control measures are ineffective or unreasonable due to sustained high wind speeds. The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.
 - (2) The visible emissions from unpaved roadways shall not exceed an average instantaneous opacity of twenty percent (20%). Average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass.

The three (3) opacity readings for each vehicle pass shall be taken as follows:

- (1) The first reading shall be taken at the time of emission generation.
- (2) The second reading shall be taken five (5) seconds later.
- (3) The third reading shall be taken five (5) seconds after the second reading, or ten (10) seconds after the first reading.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

- (b) Fugitive particulate matter (PM) emissions at this sand and gravel operation shall not escape beyond the property line or boundaries of the source property, right-of-way, or easement on which the source is located pursuant to 326 IAC 6-4.

D.6 Non-Attainment Area Particulate Matter (PM) [326 IAC 6-1]

Pursuant to 326 IAC 6-1-2(g), this portable plant shall comply with 326 IAC 2, 326 IAC 5-1 and 326 IAC 6-4 when operated in an area that has been designated as a non-attainment area for particulate matter. Compliance with Condition D.1 satisfies the requirements of 326 IAC 2 (Permit Review Rules). Compliance with Conditions D.4 and D.5 meets or exceeds the requirements of 326 IAC 5-1 (Opacity Limitations). Compliance with Conditions D.4 and D.5 shall also be presumed to show compliance with 326 IAC 6-4 (Fugitive Dust Emissions).

D.7 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emissions units and any control devices.

Compliance Determination Requirements

D.8 Dust Suppression for Crushing, Screening and Conveying Operations [326 IAC 2-9-7]

Pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants), the crushing, screening, and conveying operations shall use a wet process or continuous wet suppression system "as needed" to comply with Conditions D.1, D.4, and D.5 of this operating agreement.

D.9 Particulate Matter [326 IAC 2-9-7]

Pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants), all equipment that generate particulate matter (PM) emissions and any emission control devices shall be operated and maintained at all times in such a manner as to meet all of the requirements of this Source Specific Operating Agreement.

D.10 Testing Requirements [326 IAC 3-6] [40 CFR 60.8] [40 CFR 60.670, Subpart OOO]

- (a) Pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements), 40 CFR 60.8 (Performance Tests), and 40 CFR 60.675 (Subpart OOO, Test Methods and Procedures) compliance opacity tests shall be performed for conveying, crushing, and screening facilities within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up.
 - (1) These tests shall be performed in accordance with Section C - Performance Testing, and according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or as approved by IDEM, OAM.
 - (2) If the OAM Compliance Data Section determines at the time of review of the test protocol that some operations meet the NSPS requirements for wet

processing then those operations may be exempted from the initial performance testing, pursuant to 40 CFR 60.675(h).

- (3) In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.
- (b) Whenever the results of the compliance test performed exceed the level specified in this permit, appropriate corrective actions and a second test shall be performed in accordance with Section C - Actions Related to Noncompliance Demonstrated by a Compliance Test.

Record Keeping and Reporting Requirements

D.11 Record Keeping Requirements [326 IAC 2-9-7]

Pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants), the owner or operator shall prepare and maintain records of the annual throughput, based on a calendar year. These records shall be maintained for a minimum period of five (5) years, and made available, upon request, to the Office of Air Management (OAM).

D.12 Annual Notice [326 IAC 2-9-7]

The source shall provide an annual notice to the commissioner stating that the source is in operation and certifying that its operations are in compliance with this Source Specific Operating Agreement. This report shall be submitted to:

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

no later than January 30 of each year, in the format attached.

D.13 Exceedance Reporting Requirements [326 IAC 2-9-1(h)]

Any exceedance of any requirement contained in this operating agreement shall be reported, in writing, within one (1) week of its occurrence. The exceedance report shall include information on the actions taken to correct the exceedance, including measures to reduce emissions, in order to comply with the established limits. If an exceedance is the result of a malfunction, then the provisions of 326 IAC 1-6 apply.

Annual Notification & Certification Form Source Specific Operating Agreement Program

This form should be used to comply with the notification and certification requirements
under 326 IAC 2-9.

Company Name:	U. S. Aggregates, Inc.
Source Address:	14977 River Road, Noblesville, Indiana 46060 (initial address - portable source)
Mailing Address:	5400 West 86th Street, Indianapolis, Indiana 46268
Contact Person:	Douglas A. Lozier
Phone #:	317-875-4670
Agreement #:	S 057-11654-00055

I hereby certify that the source identified above is still in operation and is in compliance with the requirements of the above mentioned Source Specific Operating Agreement.

Name of Responsible Official (typed):
Title:
Signature:
Date:

MALFUNCTION REPORT

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

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

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

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

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

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

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

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

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

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

U. S. Aggregates
5400 West 86th Street
Indianapolis, Indiana 46268

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

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

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that the U. S. Aggregates, Inc., 14977 River Road, Noblesville, Indiana, 46060, has constructed the sand and gravel operation in conformity with the requirements and intent of the combined Construction Permit and Source Specific Operating Agreement Application that was received by the Office of Air Management on December 13, 1999; and as permitted pursuant to **MSOP/SSOA 057-11654-00055** issued on _____.

Further Affiant said not.

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

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____.

My Commission expires: _____

Signature

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Source Specific Operating Agreement (SSOA)

Source Background and Description

Source Name: U. S. Aggregates, Inc.
Source Location: 14977 River Road, Noblesville, IN 46060 (initial location - portable)
Mailing Address: 5400 West 86th Street, Indianapolis, IN 46268
County: Hamilton (initial)
SIC Code: 1442
Operation Permit No.: 057-11654-00055
Permit Reviewer: Vickie Cordell

The Office of Air Management (OAM) has reviewed an application from U. S. Aggregates, Inc. relating to the construction and operation of a portable sand and gravel operation.

Permitted Emission Units and Pollution Control Equipment

There are no previously permitted emission units and pollution control devices at this source.

Unpermitted Emission Units and Pollution Control Equipment

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

New Emission Units and Pollution Control Equipment Receiving Prior Approval

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (a) One (1) grizzly hopper, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (b) One (1) primary dry screen / vibrating scalping screen, capacity: four hundred fifty (450) tons of sand and/or gravel per hour.
- (c) One (1) primary crusher (jaw crusher), capacity: fifty (50) tons of gravel per hour.
- (d) One (1) wash screen / desanding vibrating screen, with water slurry, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (e) One (1) sand screw, capacity: one hundred (100) tons of sand and/or gravel per hour.
- (f) One (1) log washer, capacity: two hundred ninety (290) tons of sand and/or gravel per hour.
- (g) One (1) wash screen / sizing screen, with water slurry, capacity: two hundred ninety-five (295) tons of sand and/or gravel per hour.

- (h) One (1) secondary crusher (roll crusher), capacity: seventy-five (75) tons of gravel per hour.
- (i) One (1) conveying operation, capacity: four hundred (400) tons of sand and/or gravel per hour.
- (j) One (1) no. 2 diesel fuel storage tank, identified as T-1, capacity: 10,000 gallons.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation 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.

A SSOA application was received on November 4, 1999. A construction permit application for the purposes of this review was received on December 13, 1999, and the applications were combined under the current permit number. Additional information was received on December 20, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 6.)

Potential To Emit

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

Pollutant	Potential To Emit (tons/year) (uncontrolled)	Potential To Emit (tons/year) (controlled)
PM	286	67.9
PM-10	108	16.8

The potential to emit (as defined in 326 IAC 2-5.1-3) of particulate matter (PM) is equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.

Portable Source

- (a) Initial Location
This is a portable source and its initial location is in Hamilton County:

14977 River Road, Noblesville, IN 46060.

- (b) 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, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed sources under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

PSD Source Status

New Source PSD Definition (non-fugitive emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	9.2
PM-10	4.4

This new source is **not** a major stationary source because no air pollutant subject to regulation under the Clean Air Act is emitted at a rate of 100 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, 326 IAC 2-3, and 40 CFR 52.21, the PSD requirements and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

Pursuant to 326 IAC 2-9-1(b), this new portable source would be subject to the Part 70 Permit requirements, because the potential to emit (PTE) of at least one of the criteria pollutant is greater than or equal to 100 tons per year.

This new source, otherwise required to obtain a Title V permit, has concurrently applied for a Source Specific Operating Agreement (SSOA) under 326 IAC 2-9-7(b)(2) with federally enforceable limits that restrict its PTE to below the Title V emission levels.

Federal Rule Applicability

- (a) This sand and gravel processing plant is subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO. This rule requires the particulate emissions from:
 - (a) the crushing operations to be limited to fifteen percent (15%) opacity or less, and
 - (b) the screening and conveying operations to be limited to ten percent (10%) opacity or less.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326

IAC 14 and 40 CFR art 63) applicable to this source.

The 10,000 gallon diesel oil storage tank is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) because the capacity is less than 40 cubic meters.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because compliance with this SSOA limits the potential to emit of particulate matter (PM-10) to less than one hundred (100) tons per year.

326 IAC 2-9-7 (Sand and gravel plants)

The facilities and processes of this portable source shall be granted the Source Specific Operating Agreement provided that:

- (a) The source does not emit particulate matter in excess of or equal to twenty-five (25) tons per year excluding fugitive emissions.
- (b) The source shall utilize at most nine (9) crushers, twenty (20) screens, and a conveying operation.
- (c) The sand and gravel operation annual throughput shall be less than one million (1,000,000) tons per year.
- (d) Records of the annual throughput, based on a calendar year, shall be prepared and maintained. These records shall be maintained at the site for a minimum period of five (5) years, and made available, upon request, to the Office of Air Management (OAM).
- (e) The source shall use wet process or continuous wet suppression "as needed" to meet the opacity requirements.
- (f) All equipment that generate particulate matter (PM) emissions and any emission control devices shall be operated and maintained at all times of plant operation in such a manner as to meet all of the requirements of this Source Specific Operating Agreement.
- (g) The visible emissions from the screening and conveying operations shall not exceed an average of ten (10%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.
- (h) The visible emissions from the crushing operation shall not exceed an average of fifteen percent (15%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 9.
- (i) The fugitive particulate matter (PM) emissions shall be controlled by applying water on storage piles and unpaved roadways on an "as needed" basis, such that the following visible emission conditions are met:
 - (1) The visible emissions from any storage pile shall not exceed twenty percent (20%) in twenty-four (24) consecutive readings in a six (6) minute period. This limitation shall not apply during periods when application of control measures are ineffective or unreasonable due to sustained high wind speeds. The opacity

shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

- (2) The visible emissions from unpaved roadways shall not exceed an average instantaneous opacity of twenty percent (20%). Average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

- (A) The first reading shall be taken at the time of emission generation.
- (B) The second reading shall be taken five (5) seconds later.
- (C) The third reading shall be taken five (5) seconds after the second reading, or ten (10) seconds after the first reading.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

- (j) The source shall provide an annual notice to the commissioner stating that the source is in operation and certifying that its operations are in compliance with this Source Specific Operating Agreement. This report shall be submitted to:

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

no later than January 30 of each year, in the format attached.

- (k) Any exceedance of any requirement contained in this operating agreement shall be reported, in writing, within one (1) week of its occurrence.

326 IAC 2-14-4 (Relocation of Portable Sources)

- (a) This permit is approved for operation in all areas of Indiana. This determination is based on the requirements of Prevention of Significant Deterioration in 326 IAC 2-2 and 40 CFR 52.21, and Emission Offset requirements in 326 IAC 2-3. A thirty (30) day advance notice of relocation must be given to IDEM, OAM, and a "Relocation Site Approval" letter must be obtained before relocating.
- (b) 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)
- (c) A valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

326 IAC 2-8-11.1, 326 IAC 2-9-7 (Portable Source: Multiple Operations)
Pursuant to 326 IAC 2-8-11.1 and 326 IAC 2-9-7:

- (a) In such situations when the subject portable sand and gravel operation needs to operate at the same location as another operation which has been issued a Federally Enforceable State Operating Permit (FESOP), the Permittee shall apply for a minor FESOP revision and receive an approval under 326 IAC 2-8-11.1 to incorporate the subject portable operation into the FESOP, prior to its operation. In that event, both operations shall comply with the FESOP.
- (b) In such situations when the subject portable sand and gravel operation needs to operate at the same location as another sand and gravel operation which has been issued a SSOA, both operations shall operate under the SSOA that allows for the greater number of pieces of equipment and greater annual throughput. No further notification is required in this event.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity for any facilities not covered by NSPS Subpart OOO or by the Source Specific Operating Agreement for sand and gravel plants shall meet the following:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

State Rule Applicability - Individual Facilities

326 IAC 6-1 (Nonattainment Area Limitations)

In order to be able to relocate the portable sand and gravel processing plant to any nonattainment county designated by 326 IAC 6-1-7, the portable plant facilities shall meet the allowable PM emission limitation pursuant to 326 IAC 6-1. Pursuant to 326 IAC 6-1-2(g)(1), all operations subject to 326 IAC 6-1-2 (g) where the process is totally enclosed and thus it is practical to measure the emissions therefrom shall comply with the 6-1-2 (a) limit of 0.03 grains per standard dry cubic feet per minute. The portable sand and gravel plant which is not enclosed is subject to 326 IAC 6-1-2(g)(2) which requires that 326 IAC 2, 326 IAC 5-1 and 326 IAC 6-4 shall apply in all

cases to mineral aggregate operations.

326 IAC 6-4 (Fugitive Dust Emissions)

Fugitive dust shall not 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 6-5 (Fugitive Particulate Matter Emissions Limitations)

Fugitive particulate matter emissions shall be controlled according to the plan received on December 13, 1999. This plan consists of wet conveying, screening, and crushing; water on roadways as needed; and water spray on stockpiles as needed.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

None of the listed air toxics will be emitted from this source.

Conclusion

The construction and operation of this portable sand and gravel operation shall be subject to the conditions of the attached proposed **New Source Construction and Source Specific Operating Agreement 057-11654-00055**.

Appendix A: Emission Calculations
Sand and Gravel Processing

Company Name: **U. S. Aggregates, Inc.**
Address City IN Zip: **Noblesville, Indiana**
MSOP/SSOA/Plt ID: **057-11654-00055**
Reviewer: **Vickie Cordell**
Date: **January 18, 2000**

PM/TSP Emission Calculations

**** emissions before controls ****

Storage		** see page 2 **		6.21 tons/yr	AP-42 Ch.11.2.3 (Fourth edition, no update)	
Transporting: unpaved road		** see page 3 **		66.76 tons/yr	AP-42 Ch.13.2.2 (Supplement E, 9/98)	
Transporting: paved road		** see page 3 **		48.68 tons/yr	AP-42 Ch.13.2.1 (10/97)	
Truck Loading*	400 ton/hr x	0.00021 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.37 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (primary)	50 ton/hr x	0.0007 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.15 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (secondary)*	75 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	1.66 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Crushing (tertiary)*	0 ton/hr x	0.00504 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.00 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening (dry/scalper)*	450 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	62.09 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening (wash/desanding)†	400 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	55.19 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening (wash/sizing)*	290 ton/hr x	0.0315 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	40.01 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	400 ton/hr x	0.00294 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	5.15 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions before controls:					286.26 tons/yr	

* TSP/PM emission factors were calculated by multiplying the AP-42 (1/95 version) PM-10 emission factors by 2.1, in accordance with Table 11.19.2-2 footnote c.

**** emissions after controls ****

Storage	6.21 tons/yr x	10% emitted after controls =		0.62 tons/yr		
Transporting: unpaved road	66.76 tons/yr x	50% emitted after controls =		33.38 tons/yr		
Transporting: paved road	48.68 tons/yr x	50% emitted after controls =		24.34 tons/yr		
Truck Loading*	0.37 tons/yr x	100% emitted after controls =		0.37 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)	
Crushing (primary)	0.15 tons/yr x	10% emitted after controls =		0.02 tons/yr		
Crushing (secondary)	1.66 tons/yr x	10% emitted after controls =		0.17 tons/yr		
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =		0.00 tons/yr		
Screening (dry/scalper)*	450 ton/hr x	0.00176 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.48 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening (wash/desanding)†	400 ton/hr x	0.00176 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	3.09 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Screening (wash/sizing)*	290 ton/hr x	0.00176 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.24 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Conveyor Transfer*	400 ton/hr x	0.00010 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	0.18 tons/yr	AP-42 Ch.11.19.2 (Fifth edition, 1/95)
Total emissions after controls:					67.87 tons/yr	

* TSP/PM emission factors were calculated by multiplying the AP-42 (1/95 version) PM-10 emission factors by 2.1, in accordance with Table 11.19.2-2 footnote c.

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 Noblesville, Indiana
 057-11654-00055

PM/TSP Emission Calculations

**** fugitive vs. nonfugitive ****

Storage	6.21 tons/yr x	10% emitted after controls =	0.62 tons/yr
Transporting: total	115.44 tons/yr x	50% emitted after controls =	57.72 tons/yr
Loading / Unloading	0.37 tons/yr x	100% emitted after controls =	0.37 tons/yr
Total fugitive emissions:			58.71 tons/yr

Crushing (primary)	0.15 tons/yr x	10% emitted after controls =	0.02 tons/yr
Crushing (secondary)	1.66 tons/yr x	10% emitted after controls =	0.17 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening (dry/scalper)*	450 ton/hr x	0.00176 lb/ton / 2000 lb/ton x	8760 hr/yr = 3.48 tons/yr
Screening (wash/desanding)†	400 ton/hr x	0.00176 lb/ton / 2000 lb/ton x	8760 hr/yr = 3.09 tons/yr
Screening (wash/sizing)*	290 ton/hr x	0.00176 lb/ton / 2000 lb/ton x	8760 hr/yr = 2.24 tons/yr
Conveyor Transfer*	400 ton/hr x	0.00010 lb/ton / 2000 lb/ton x	8760 hr/yr = 0.18 tons/yr
Total nonfugitive emissions:			9.16 tons/yr

AP-42 Ch.11.19.2 (Fifth edition, 1/95)
 AP-42 Ch.11.19.2 (Fifth edition, 1/95)
 AP-42 Ch.11.19.2 (Fifth edition, 1/95)
 AP-42 Ch.11.19.2 (Fifth edition, 1/95)

**** 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

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

$$= 6.21 \text{ tons/yr}$$

where sc = 100,000 tons storage capacity

Note: This calculation is from AP-42, Fourth edition. The calculations were not included in subsequent editions of AP-42; therefore, use of this calculation is at permit reviewer's discretion.

U. S. Aggregates, Inc.
 Noblesville, Indiana
 057-11654-00055

PM/TSP Emission Calculations

**** unpaved roads ****

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

$$\begin{aligned}
 &6.25 \text{ trip/hr} \times \\
 &0.08 \text{ mile/trip} \times \\
 &2 \text{ (round trip) } \times \\
 &8760 \text{ hr/yr} = \qquad \qquad \qquad \mathbf{8760 \text{ miles per year}}
 \end{aligned}$$

Method 1:

$$\begin{aligned}
 E_f &= k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c] \\
 &= 22.86 \text{ lb/mile;} \\
 \text{where } k &= 10 \text{ Constant, } k = 2.6 \text{ for PM-10; } k = 10 \text{ for PM-30 or TSP} \\
 s &= 8 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.5 \text{ Constant, } b = 0.4 \text{ for PM-10; } b = 0.5 \text{ for PM-30 or TSP} \\
 c &= 0.4 \text{ Constant, } c = 0.3 \text{ for PM-10; } c = 0.4 \text{ for PM-30 or TSP} \\
 W &= 30 \text{ tons average vehicle weight, (loaded weight + tare weight)/2} \\
 M &= 0.2 \text{ surface material moisture content, \% (default is 0.2 for dry conditions)}
 \end{aligned}$$

Method 2 This method has a lower quality rating than Method 1.

$$\begin{aligned}
 E_f &= \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c]\} \cdot [(365-p)/365] \\
 &= 15.03 \text{ lb/mile} \\
 \text{where } k &= 10 \text{ Constant, } k = 2.6 \text{ for PM-10; } k = 10 \text{ for PM-30 or TSP} \\
 s &= 8 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.5 \text{ Constant, } b = 0.4 \text{ for PM-10; } b = 0.5 \text{ for PM-30 or TSP} \\
 c &= 0.4 \text{ Constant, } c = 0.3 \text{ for PM-10; } c = 0.4 \text{ for PM-30 or TSP} \\
 W &= 30 \text{ tons average vehicle weight, (loaded weight + tare weight)} \\
 M_{dry} &= 0.2 \text{ surface material moisture content, \% (default is 0.2 for dry} \\
 p &= 125 \text{ \# of days with at least 0.254mm of precipitation (See Figur}
 \end{aligned}$$

$$\begin{aligned}
 \text{Adjusted } E_f &: 22.86 \text{ lb/mile} \times 10 \text{ avg spd/15 mph} = 15.24 \text{ lb/mile} \\
 &\qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \text{(AP-42 13.2.2-4, 9/98)} \\
 15.24 \text{ lb/mi} \times \frac{8760 \text{ mi/yr}}{2000 \text{ lb/ton}} &= 66.76 \text{ tons/yr}
 \end{aligned}$$

$$\begin{aligned}
 15.03 \text{ lb/mi} \times \frac{8760 \text{ mi/yr}}{2000 \text{ lb/ton}} &= 65.84 \text{ tons/yr}
 \end{aligned}$$

Note: The permit reviewer can choose the method he/she wants to use. See AP-42 13.2.2 for further information.
 >Cell J15 should reference Cell E110 if Method 1 is used, or Cell M110 if Method 2 is used.<

**** paved roads ****

The following calculation estimates the amount of emissions created by paved roads, based on 8760 hours of use and AP-42, Ch 13.2.1 (10/97).

$$\begin{aligned}
 &6.25 \text{ trip/hr} \times \\
 &0.034 \text{ mile/trip} \times \\
 &2 \text{ (round trip) } \times \\
 &8760 \text{ hr/yr} = \qquad \qquad \qquad \mathbf{3723 \text{ miles per year}}
 \end{aligned}$$

$$\begin{aligned}
 E_f &= k \cdot [(sL/2)^{0.65}] \cdot [(W/3)^{1.5}] \\
 &= 26.15 \text{ lb/mile} \\
 \text{where } k &= 0.082 \text{ base emission factor, } k = 0.016 \text{ for PM-10; } k = .082 \text{ for PM-30 or TSP (factor also includes unit conversion for equation)} \\
 sL &= 70 \text{ road surface silt loading (g/m}^2\text{), AP-42 (10/97) Table 13.2.1-3}
 \end{aligned}$$

W = 30 average weight (tons) of the vehicles traveling road, (loaded weight + tare weight)/2

$$26.15 \text{ lb/mi} \times 3723 \text{ mi/yr} / 2000 \text{ lb/ton} = 48.68 \text{ tons/yr}$$

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 Noblesville, Indiana
 057-11654-00055

PM-10 Emission Calculations

**** fugitive vs. nonfugitive ****

Storage	6.21 tons/yr x	10% emitted after controls =	0.62 tons/yr
Transporting: total	23.29 tons/yr x	50% emitted after controls =	11.64 tons/yr
Loading / Unloading	0.18 tons/yr x	100% emitted after controls =	0.18 tons/yr
Total fugitive emissions:			12.44 tons/yr

Crushing (primary)	0.15 tons/yr x	10% emitted after controls =	0.02 tons/yr
Crushing (secondary)	0.79 tons/yr x	10% emitted after controls =	0.08 tons/yr
Crushing (tertiary)	0.00 tons/yr x	10% emitted after controls =	0.00 tons/yr
Screening (dry/scalper)*	450 ton/hr x	0.00084 lb/ton / 2000 lb/ton x	8760 hr/yr = 1.66 tons/yr
Screening (wash/desanding)*	400 ton/hr x	0.00084 lb/ton / 2000 lb/ton x	8760 hr/yr = 1.47 tons/yr
Screening (wash/sizing)*	290 ton/hr x	0.00084 lb/ton / 2000 lb/ton x	8760 hr/yr = 1.07 tons/yr
Conveyor Transfer*	400 ton/hr x	4.8E-05 lb/ton / 2000 lb/ton x	8760 hr/yr = 0.08 tons/yr
Total nonfugitive emissions:			4.37 tons/yr

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

AP-42 Ch.11.19.2 (Fifth edition, 1/95)

**** 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

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

$$= 6.21 \text{ tons/yr}$$

NOTE: Due to lack of PM-10 data, all PM assumed to be PM-10 for this calculation.
 where sc = 100 ,000 tons storage capacity

Note: This calculation is from AP-42, Fourth edition. The calculations were not included in subsequent editions of AP-42; therefore, use of this calculation is at permit reviewer's discretion.

U. S. Aggregates, Inc.
 Noblesville, Indiana
 057-11654-00055

PM-10 Emission Calculations

**** unpaved roads ****

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

$$\begin{aligned}
 & 6.25 \text{ trip/hr} \times \\
 & 0.08 \text{ mile/trip} \times \\
 & 2 \text{ (round trip) } \times \\
 & 8760 \text{ hr/yr} = \qquad \qquad \qquad \mathbf{8760} \text{ miles per year}
 \end{aligned}$$

Method 1:

$$\begin{aligned}
 E_f &= k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c] \\
 &= 4.72 \text{ lb/mile;} \\
 \text{where } k &= 2.6 \text{ Constant, } k = 2.6 \text{ for PM-10; } k = 10 \text{ for PM-30 or TSP} \\
 s &= 8 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.4 \text{ Constant, } b = 0.4 \text{ for PM-10; } b = 0.5 \text{ for PM-30 or TSP} \\
 c &= 0.3 \text{ Constant, } c = 0.3 \text{ for PM-10; } c = 0.4 \text{ for PM-30 or TSP} \\
 W &= 30 \text{ tons average vehicle weight, (loaded weight + tare weight)/2} \\
 M &= 0.2 \text{ surface material moisture content, \% (default is 0.2 for dry conditions)}
 \end{aligned}$$

Method 2 This method has a lower quality rating than Method 1.

$$\begin{aligned}
 E_f &= \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c]\} \cdot [(365-p)/365] \\
 &= 3.10 \text{ lb/mile} \\
 \text{where } k &= 2.6 \text{ Constant, } k = 2.6 \text{ for PM-10; } k = 10 \text{ for PM-30 or TSP} \\
 s &= 8 \text{ mean \% silt content of unpaved roads} \\
 b &= 0.4 \text{ Constant, } b = 0.4 \text{ for PM-10; } b = 0.5 \text{ for PM-30 or TSP} \\
 c &= 0.3 \text{ Constant, } c = 0.3 \text{ for PM-10; } c = 0.4 \text{ for PM-30 or TSP} \\
 W &= 30 \text{ tons average vehicle weight, (loaded weight + tare weight)/2} \\
 M_{dry} &= 0.2 \text{ surface material moisture content, \% (default is 0.2 for dry conditions)} \\
 p &= 125 \text{ \# of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)}
 \end{aligned}$$

$$\begin{aligned}
 \text{Adjusted } E_f &= 4.72 \text{ lb/mile} \times 10 \text{ avg spd/15 mph} = 3.15 \text{ lb/mile} \\
 & \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \text{(AP-42 13.2.2-4, 9/98)} \\
 \frac{3.15 \text{ lb/mi} \times 8760 \text{ mi/yr}}{2000 \text{ lb/ton}} &= 13.79 \text{ tons/yr}
 \end{aligned}$$

$$\begin{aligned}
 \frac{3.10 \text{ lb/mi} \times 8760 \text{ mi/yr}}{2000 \text{ lb/ton}} &= 13.60 \text{ tons/yr}
 \end{aligned}$$

Note: The permit reviewer can choose the method he/she wants to use. See AP-42 13.2.2 for further information.
 >Cell J15 should reference Cell E109 if Method 1 is used, or Cell M109 if Method 2 is used.<

**** paved roads ****

The following calculation estimates the amount of emissions created by paved roads, based on 8760 hours of use and AP-42, Ch 13.2.1 (10/97).

$$\begin{aligned}
 & 6.25 \text{ trip/hr} \times \\
 & 0.034 \text{ mile/trip} \times \\
 & 2 \text{ (round trip) } \times \\
 & 8760 \text{ hr/yr} = \qquad \qquad \qquad \mathbf{3723} \text{ miles per year}
 \end{aligned}$$

$$\begin{aligned}
 E_f &= k \cdot [(sL/2)^{0.65}] \cdot [(W/3)^{1.5}] \\
 &= 5.10 \text{ lb/mile} \\
 \text{where } k &= 0.016 \text{ base emission factor (lb), } k = 0.016 \text{ for PM-10; } k = .082 \text{ for PM-30 or TSP (factor also includes unit conversion for equation)} \\
 sL &= 70 \text{ road surface silt loading (g/m}^2\text{), AP-42 (10/97) Table 13.2.1-3} \\
 W &= 30 \text{ average weight (tons) of the vehicles traveling road, (loaded weight + tare weight)/2}
 \end{aligned}$$

$$\begin{aligned}
 5.10 \text{ lb/mi} \times 3723 \text{ mi/yr} / 2000 \text{ lb/ton} &= 9.50 \text{ tons/yr}
 \end{aligned}$$

