



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: January 31, 2006
RE: Chief Excavation, Inc. / 089-22016-00486
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 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 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 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-MOD.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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Indianapolis, Indiana 46204-2251
(317) 232-8603
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Mr. Bobby Randolph
Chief Excavation, Inc.
11829 Burr Street
Crown Point, Indiana 46307

January 31, 2006

Re: Minor Source Modification No:
089-22016-00486

Dear Mr. Randolph:

U.S. Steel Gary Works applied for a Part 70 Operating Permit on December 13, 1996 for a steel mill and Chief Excavation, Inc. applied for a Part 70 Operating Permit on November 14, 2003. An application to modify the source was received from Chief Excavation, Inc. on November 18, 2005. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for operation at the source:

One (1) alloys material handling and primary and fines screening operations, installed in February 2003, capacity: 75 tons of metal alloys, consisting of:

- (a) Aggregate handling operations;
- (b) Alloy primary and fines screening;
- (c) Front-end loader travel on paved roads; and
- (d) One (1) internal combustion diesel engine, input heat capacity: 0.160 million British thermal units per hour.

The Minor Source Modification approval will be incorporated into the pending Part 70 Permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Mark L. Kramer, c/o OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, at 631-691-3395, ext. 12 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by
Paul Dubenetzky, Assistant Commissioner
Office of Air Quality

Attachments (TSD and Permit)
MLK/MES

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Branch
Administrative and Development
Technical Support and Modeling - Michele Boner



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PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Chief Excavation, Inc.
One North Broadway
Gary, Indiana 46402**

(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.

Source Modification No.: 089-22016-00486	
Issued by: Original signed by Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: January 31, 2006 Expiration Date: January 31, 2011

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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 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 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 stationary alloys material screening operation.

Responsible Official:	Vice President
Source Address:	One North Broadway, Gary, Indiana 46402
Mailing Address:	11829 Burr Street, Crown Point, Indiana 46307
General Source Phone Number:	219 – 663 – 4285
SIC Code:	3312
County Location:	Lake
Source Location Status:	Severe Nonattainment for 1-hr ozone standard Nonattainment for 8-hr ozone standard, PM _{2.5} and SO ₂ Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

This steel mill consists of a source with an on-site contractor:

- (a) U.S. Steel - Gary Works, the primary operation, is located at One North Broadway, Gary Indiana 46402; and
- (b) Chief Excavation, Inc., the supporting operation, is located at One North Broadway, Gary Indiana 46402.

IDEM has determined that U.S. Steel - Gary Works and Chief Excavation, Inc. are under the common control of U.S. Steel - Gary Works. Therefore, they will be considered one source, as defined by 326 IAC 2-7-1(22), based on this contractual control. Therefore, the term "source" in the Part 70 documents refers to both U.S. Steel - Gary Works and Chief Excavation, Inc. as one source.

Separate Part 70 Operating Permits will be issued to U.S. Steel - Gary Works with Permit No. T 089-7663-00121 and Chief Excavation, Inc. with Permit No. T 089-18339-00486 solely for administrative purposes.

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

This stationary source is approved to operate the following emission units and pollution control devices:

One (1) alloys material handling and primary and fines screening operations, installed in February 2003, capacity: 75 tons of metal alloys, consisting of:

- (a) Aggregate handling operations;
- (b) Alloy primary and fines screening;
- (c) Front-end loader travel on paved roads; and
- (d) One (1) internal combustion diesel engine, input heat capacity: 0.160 million British thermal units per hour.

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

This stationary source modification does not involve any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION 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 [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

C.3 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

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

C.4 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]

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

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

C.5 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

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

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

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

Any such application 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.6 Opacity [326 IAC 5-1]

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

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

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.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 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (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 (0) percent 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 (0) percent 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 6.8-10-3 (formerly 326 IAC 6-1-11.1(d)) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on date.

C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on January 6, 2006 that consisted of applying water to all roads and storage piles before daily operations begin.

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

C.10 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
Indianapolis, Indiana 46204-2251

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

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

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

C.13 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.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

C.16 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 Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

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

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

Northwest Regional Office:
Telephone Number: 219-757-0265
Facsimile Number: 219-757-0267

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

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

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

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

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

provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

C.17 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
Indianapolis, Indiana 46204-2251

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

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

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

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

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

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq)) and 326 IAC 2-3-1 (ll) at an existing emissions unit other than projects at a Clean Unit), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee)) or 326 IAC 2-3-1 (z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr)) or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq)) or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project;
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project;
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr) (2)(A)(iii) or 326 IAC 2-3-1(mm)(2)(A)(3); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.1 FACILITY OPERATION CONDITIONS

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

One (1) alloys material handling and primary and fines screening operations, installed in February 2003, capacity: 75 tons of metal alloys, consisting of:

- (a) Aggregate handling operations;
- (b) Alloy primary and fines screening;
- (c) Front-end loader travel on paved roads; and
- (d) One (1) internal combustion

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

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

D.1.1 Throughput Limit [326 IAC 2-2] [326 IAC 2-3] [326 IAC 2-7-10.5(d)(4)]

The throughput of alloys material to the fines screening operation shall be less than 42,774.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This throughput limit is required to limit the potential to emit of PM and PM₁₀ from this minor source modification to less than twenty five (25) tons of PM per year and to less than fifteen (15) tons of PM₁₀ per year. Compliance with this limit makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) not applicable. Compliance with this limit also satisfies the requirements of 326 IAC 2-7-10.5(d)(4).

D.1.2 Particulate Matter (PM) [326 IAC 6.8-1-2(g)]

The screening operations which are not totally enclosed are subject to 326 IAC 6.8-1-2(g) (formerly 326 IAC 6-1-2(g)) that requires compliance with 326 IAC 2, 326 IAC 5-1 and 326 IAC 6-4.

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

D.1.3 Visible Emissions Notations

- (a) Visible emission notations of the material handling and primary and fines screening operations shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take

response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the throughput of alloys material to the fines screening operation on a monthly basis.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records of daily visible emission notations of the material handling and primary and fines screening operations.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Chief Excavation, Inc.
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: 11829 Burr Street, Crown Point, Indiana 46307
Source Modification No.: MSM 089-22016-00486

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 BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Chief Excavation, Inc.
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: 11829 Burr Street, Crown Point, Indiana 46307
Source Modification No.: MSM 089-22016-00486

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

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

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

Source Name: Chief Excavation, Inc.
 Source Address: One North Broadway, Gary, Indiana 46402
 Mailing Address: 11829 Burr Street, Crown Point, Indiana 46307
 Source Modification No.: MSM 089-22016-00486

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

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Source Modification Quarterly Report

Source Name: Chief Excavation, Inc.
 Source Address: One North Broadway, Gary, Indiana 46402
 Mailing Address: 11829 Burr Street, Crown Point, Indiana 46307
 Source Modification No.: MSM 089-22016-00486
 Facility: Fine screening operations
 Parameter: Alloys through fine screening operations
 Limit: 42,774.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month equivalent to 6.42 tons of PM per year and 24.7 tons of PM per year for the entire source modification

YEAR: _____

Month	Tons of Alloys Fine Screened	Tons of Alloys Fine Screened	Tons of Alloys Fine Screened
	This Month	Previous 11 Months	12 Month Total

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

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Technical Support Document (TSD) for a
Part 70 Minor Source Modification.

Source Description and Location

Source Name:	Chief Excavation, Inc.
Source Location:	One North Broadway, Gary 46402
County:	Lake
SIC Code:	3312
Operation Permit No.:	T 089-18339-00486
Operation Permit Issuance Date:	Not Issued Yet
Minor Source Modification No.:	MSM 089-22016-00486
Permit Reviewer:	Mark L. Kramer

Source Definition

This steel mill consists of a source with an on-site contractor:

- (a) U.S. Steel - Gary Works, the primary operation, is located at One North Broadway, Gary Indiana 46402; and
- (b) Chief Excavation, Inc., the supporting operation, is located at One North Broadway, Gary Indiana 46402.

IDEM has determined that U.S. Steel - Gary Works and Chief Excavation, Inc. are under the common control of U.S. Steel - Gary Works. Therefore, they will be considered one source, as defined by 326 IAC 2-7-1(22), based on this contractual control. Therefore, the term "source" in the Part 70 documents refers to both U.S. Steel - Gary Works and Chief Excavation, Inc. as one source.

Separate Part 70 Operating Permits will be issued to U.S. Steel - Gary Works with Permit No. T 089-7663-00121 and Chief Excavation, Inc. with Permit No. T 089-18339-00486 solely for administrative purposes.

Existing Approvals

The source submitted an application for a Part 70 Operating Permit (T 089-18339-00486) on November 14, 2003. At this time this application is still under review.

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Nonattainment
SO ₂	Nonattainment

Pollutant	Status
NO ₂	Attainment
1-hour Ozone	Severe Nonattainment
8-hour Ozone	Moderate Nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.
- (1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO_x threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standard. Lake County has been designated as severe nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
 - (2) VOC and NO_x emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Lake County has been classified as nonattainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Emission Offset, 326 IAC 2-3 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for Emission Offset review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.
- (c) Lake County has been classified as nonattainment in Indiana for sulfur dioxide. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (d) Lake County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (e) Since this source is classified as an iron and steel mill, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (f) Fugitive Emissions
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
-----------	-----------------------

Pollutant	Emissions (tons/year)
PM	greater than 250
PM ₁₀	greater than 250
SO ₂	greater than 100
VOC	greater than 25
CO	greater than 100
NO _x	greater than 100

This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because a nonattainment regulated pollutant is emitted at a rate of twenty-five (25) tons or more.

These emissions are based upon the actual emissions.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
Single	greater than 10
Combination	greater than 25
TOTAL	greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM _{2.5}	2,751
PM ₁₀	3,355
SO ₂	6,953
VOC	2,001
CO	89,107
NO _x	5,123

Pollutant	Actual Emissions (tons/year)
Lead	1.01
Other HAPs	Not Available

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Chief Excavation, Inc. on November 18, 2005, relating to the operation of alloys material screening operations at the U.S. Steel - Gary Works (089-00121). Chief Excavation, Inc. submitted their Part 70 Operating Permit application November 14, 2003. The following is a list of the unpermitted emission units:

One (1) alloys material handling and primary and fines screening operations, installed in February 2003, capacity: 75 tons of metal alloys, consisting of:

- (a) Aggregate handling operations;
- (b) Alloy primary and fines screening;
- (c) Front-end loader travel on paved roads; and
- (d) One (1) internal combustion diesel engine, input heat capacity: 0.160 million British thermal units per hour.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Stack Summary

There are no stacks associated with this contractor's operations

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission 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, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	122
PM ₁₀	31.0
SO ₂	0.203
VOC	0.252
CO	0.666
NO _x	3.09

HAPs	Potential To Emit (tons/year)
Combination of HAPs	6.63
TOTAL	6.63

This source modification is subject to 326 IAC 2-7-10.5(d)(4) for a modification for which the potential to emit is limited to less than the twenty-five (25) tons per year of any regulated pollutants other than HAPs. Since the Part 70 Operating Permit for Chief Excavation, Inc. has not been issued yet, the approval of this minor source modification will allow Chief Excavation, Inc. to operate the alloys material screening operations.

Permit Level Determination – PSD or Emission Offset

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	Potential to Emit					
	PM (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (lbs/day)	CO (tons/yr)	NO _x (tons/yr)
Screening Operations	24.7	7.68	-	-	-	-
Insignificant Diesel RICE	0.217	0.217	0.203	1.38	0.666	3.09
Total for Modification	24.9	7.90	0.203	1.38	0.666	3.09
Significant PSD or Emission Offset Level	25	15	40		100	40
De Minimis Rule Applicability Level (VOC only)				15		

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

This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Since VOC emissions from the internal combustion diesel engine are less than fifteen (15) pounds per day, and the NO_x emissions are less than forty (40) tons per year, the Emission Offset rules, 326 IAC 2-3, do not apply for these pollutants and therefore the modification is not subject to the De Minimis rule five (5) year review requirements.

Lake County has been designated as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM_{2.5} Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM_{2.5} major NSR regulations, states should assume that a major stationary source's PM₁₀ emissions represent PM_{2.5} emissions. IDEM will use the PM₁₀ nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM_{2.5} NAAQS. A significant emissions increase would be a net emissions increase or the potential of fifteen (15) tons per year or greater of PM₁₀. Chief Excavation, Inc. has limited the potential to emit of PM₁₀ from the modification to less than fifteen (15) tons per year. Therefore, assuming that PM₁₀ emissions represent PM_{2.5} emissions, 326 IAC 2-3 does not apply for PM_{2.5}.

Since the entire source is considered a major Emission Offset source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year and fifteen (15) tons of PM₁₀ per year, Chief Excavation, Inc. has elected to limit the potential to emit of this modification as follows:

The throughput of alloys to the fines screening operation has been limited to no more than 42,774.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This throughput limit was calculated with AP-42 emission factors and was coupled with the unrestricted potential to emit PM and PM₁₀ from the screening and handling operations.

Compliance with this throughput limit will ensure that the potential to emit from this modification does not exceed twenty-five (25) tons of PM per year and fifteen (15) tons of PM₁₀ per year and therefore will render the requirements of 326 IAC 2-3 not applicable.

Federal Rule Applicability Determination

The following federal rules are applicable to this modification:

- (a) This modification is not subject to the requirements of the New Source Performance Standard for Nonmetallic Mineral Processing Plants, 40 CFR 60.670 through 60.676, Subpart OOO due to the fact that the operations at Chief Excavation, Inc. do not include crushing.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.
- (c) This modification which includes the addition of an internal combustion diesel engine with an input heat capacity of 0.160 million British thermal units per hour is subject to the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63.6580 through 63.6675, Subpart ZZZZ. However, pursuant to 40 CFR 63.6590(a) since the RICE is not rated at more than 500 brake horsepower, the RICE is not an affected source.
- (d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not applicable to the modification because the modification does not involve a pollutant-specific emission unit

defined in 40 CFR 64.1 that has a potential to emit before controls equal to or greater than the major source threshold for PM₁₀

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the units as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to Chief Excavation due to this modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination - PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of alloy material screening operation will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Since this source is located in Lake County, and the entire source has the potential to emit NO_x and VOC greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6.8 Particulate Matter Limitations for Lake County (formerly 326 IAC 6-1-10.1)

Although U.S. Steel - Gary Works is a listed source in 326 IAC 6.8-2-38 (Lake County: PM₁₀ Emission Requirements) (formerly 326 IAC 6-1-10.1(d)(36)) none of the facilities associated with the Chief Excavation, Inc. operations are specifically cited, therefore this rule does not apply to the Chief Excavation, Inc. facilities.

Pursuant to 326 IAC 6.8-1-2(a) (formerly 326 IAC 6-1-2 (a)), PM emissions from the Chief Excavation, Inc. operations that are totally enclosed shall not exceed 0.03 grain per dry standard cubic foot. The screening operations which are not enclosed are subject to 326 IAC 6.8-1-2(g) (formerly 326 IAC 6-1-2(g)) which requires compliance with 326 IAC 2, 326 IAC 5-1 and 326 IAC 6-4.

326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements) (formerly 326 IAC 6-1-11.1)

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source-wide activities shall meet the following requirements:

- (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 (0) percent 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 (0) percent 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 6.8-10-3 (formerly 326 IAC 6-1-11.1(d)) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall comply with these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on January 6, 2006 that consists of applying water to all roads and storage piles before daily operations begin.

326 IAC 7-1.1 (Sulfur dioxide emission limitations)

Since the internal combustion diesel engine does not have the potential to emit twenty-five (25) tons per year or more of SO₂, this rule is not applicable.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop

specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance determination requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

(a) There are no compliance determination requirements applicable to this modification.

The compliance monitoring requirements applicable to this modification are as follows:

(b) The alloy materials screening operations have applicable compliance monitoring conditions as specified below:

- (1) Visible emission notations of the screening operations shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (2) 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.
- (3) 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.
- (4) 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.
- (5) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the screening operations must operate properly to ensure compliance with 326 IAC 5-1, 326 IAC 6-4, 326 IAC 6.8 and 326 IAC 2-7 (Part 70).

Conclusion and Recommendation

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 089-22016-00486. The staff recommends to the Commissioner that this Part 70 Minor Source Modification be approved.

Appendix A: Emission Calculations

Company Name: Chief Excavation, Inc.
Address City IN Zip: One North Broadway, Gary, Indiana 46402
Permit Number: MSM 089-22016
Plant ID: 089-00486
Reviewer: Mark L. Kramer
Application Date: November 18, 2005

**** potential emissions* ****

					PM		
Storage		** see page 2 **			0.00 tons/yr		AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Transporting		** see page 3 **			10.70 tons/yr		AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading	225 ton/hr x	0.0048 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	4.72 tons/yr		AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Screening (PM)	75 ton/hr x	0.025 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	8.21 tons/yr		AP-42 Ch.11.19.2 (8/04)
Fines Screening (PM)	75 ton/hr x	0.30 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	98.55 tons/yr		AP-42 Ch.11.19.2 (8/04)
Total PM emissions:					122.19 tons/yr		

					PM-10		
Storage		** see page 2 **			0.00 tons/yr		AP-42 Ch.13.2.4 (Fifth edition, 1/95)
Transporting		** see page 3 **			2.09 tons/yr		AP-42 Ch.13.2.2 (12/2003)
Loading & Unloading (PM-10)	225 ton/hr x	0.0023 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.23 tons/yr		AP-42 Ch.13.2.4 (Fifth edition, 1/95) calculated
Screening (PM-10)	75 ton/hr x	0.0087 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	2.86 tons/yr		AP-42 Ch.11.19.2 (8/04)
Fines Screening (PM-10)	75 ton/hr x	0.072 lb/ton	/ 2000 lb/ton x	8760 hr/yr =	23.65 tons/yr		AP-42 Ch.11.19.2 (8/04)
Total PM-10 emissions:					30.83 tons/yr		

Note 3 drops at 75 tons/hr per drop.

**** potential emissions after taking into account fugitive dust plan ****

					PM		
Storage	0.00 tons/yr x	100% emitted after controls =			0.00 tons/yr		
Transporting	10.70 tons/yr x	50% emitted after controls =			5.35 tons/yr		
Loading & Unloading	4.72 tons/yr x	100% emitted after controls =			4.72 tons/yr		
Screening (PM)	8.21 tons/yr x	100% emitted after controls =			8.21 tons/yr		
Fines Screening (PM)	98.55 tons/yr x	100% emitted after controls =			98.55 tons/yr		
Total PM emissions:					116.84 tons/yr		

					PM-10		
Storage	0.00 tons/yr x	100% emitted after controls =			0.00 tons/yr		
Transporting	2.09 tons/yr x	50% emitted after controls =			1.04 tons/yr		
Loading & Unloading	2.23 tons/yr x	100% emitted after controls =			2.23 tons/yr		
Screening (PM-10)	2.86 tons/yr x	100% emitted after controls =			2.86 tons/yr		
Fines Screening (PM-10)	23.65 tons/yr x	100% emitted after controls =			23.65 tons/yr		
Total PM-10 emissions:					29.79 tons/yr		

Throughput Limit for Fines Screening = 42774.4 tons/yr based on PM as the limiting case (PSD < 25 TPY) and PM-10 < 15 TPY

**** emissions after throughput limits* ****

					PM		
Storage	0.00 tons/yr x	100% emitted after controls =			0.00 tons/yr		
Transporting	10.70 tons/yr x	50% emitted after controls =			5.35 tons/yr		
Loading & Unloading	4.72 tons/yr x	100% emitted after controls =			4.72 tons/yr		
Screening (PM)	8.21 tons/yr x	100% emitted after controls =			8.21 tons/yr		
Fines Screening (PM)	6.42 tons/yr x	100% emitted after controls =			6.42 tons/yr		
Total PM emissions after limits:					24.70 tons/yr		

					PM-10		
Storage	0.00 tons/yr x	100% emitted after controls =			0.00 tons/yr		
Transporting	2.09 tons/yr x	50% emitted after controls =			1.04 tons/yr		
Loading & Unloading	2.23 tons/yr x	100% emitted after controls =			2.23 tons/yr		
Screening (PM-10)	2.86 tons/yr x	100% emitted after controls =			2.86 tons/yr		
Fines Screening (PM-10)	1.54 tons/yr x	100% emitted after controls =			1.54 tons/yr		
Total PM-10 emissions after limits:					7.68 tons/yr		

Appendix A: Emission Calculations

Company Name: Chief Excavation, Inc.
Address City IN Zip: One North Broadway, Gary, Indiana 46402
Permit Number: MSM 089-22016
Plant ID: 089-00486
Reviewer: Mark L. Kramer
Application Date: November 18, 2005

** paved roads **

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1.3 (8/2004).

150 feet per trip and water all roads before operations begin on a daily basis

7.94 trip/hr x
 0.0284 mile/trip x
 2 (round trip) x
 8760 hr/yr = 3951.95 miles per year

$E = k \cdot [(sL/2)^{0.65}] \cdot (W/3)^{1.5} - C$
PM 5.41 lb/mile **PM-10** 1.06 lb/mile
E = Emission factor in lbs/mile traveled
 where k = 0.082 (particle size multiplier for PM) in lbs/vehicle mile traveled
 where k = 0.016 (particle size multiplier for PM-10) in lbs/vehicle mile traveled
 sL = 9.7 road silt loading in g/square meter
 W = 24.725 average vehicle weight in tons of the vehicles traveling the road
 C = 0.00047 emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear in lbs/vehicle mile traveled

$PM = \frac{5.41 \text{ lb/mi} \times 3951.9545 \text{ mi/yr}}{2000 \text{ lb/ton}} = 10.70 \text{ tons/yr}$

$PM-10 = \frac{1.06 \text{ lb/mi} \times 3951.9545 \text{ mi/yr}}{2000 \text{ lb/ton}} = 2.09 \text{ tons/yr}$

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

Maximum throughput of alloy = 75 tons per hour

PM	$Ef = k \cdot (0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$ = 0.0048 lb/ton where k = 0.74 (particle size multiplier) U = 10 mile/hr mean wind speed M = 2.3 % material moisture content	PM-10	$Ef = k \cdot (0.0032) \cdot (U/5)^{1.3} / (M/2)^{1.4}$ = 0.0023 lb/ton where k = 0.35 (particle size multiplier) U = 10 mile/hr mean wind speed M = 2.3 % material moisture content
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Mean wind speed from Gary Airport supplied by Applicant as 10 mph

Alloy Control Material Handling involves 3 batch drop operations

1. Front-end loader drop to screen
2. Screen drop to pad
3. Front-end loader drop to stockpiles

Therefore, the emission factor for the material handling process cycle is multiplied by 3 in calculating the PM and PM-10 emission rate from the 3 drops.

PM = 3 * maximum throughput in tons/hr * 8,760 hr/year * 0.0048 lb/ton * 1 ton/2000 lbs

PM = 4.72 TPY
PM-10 = 2.23 TPY

The applicant has conservatively assumed that all PM-10 from the material handling and screening are metallic HAPs.
6.63 TPY

**Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel**

Reciprocating

Company Name: Chief Excavation, Inc.
Address City IN Zip: One North Broadway, Gary, Indiana 46402
Permit Number: MSM 089-22016
Pit ID: 089-00486
Reviewer: Mark L. Kramer
Application Date: November 18, 2005

Diesel Engine

Heat Input Capacity
MM Btu/hr

0.160

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.31	0.31	0.29	4.41	0.4	0.95
Potential Emission in tons/yr	0.217	0.217	0.203	3.09	0.252	0.666

Methodology

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

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-1

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (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.

HAPs Emission Calculations

HAP	Emission Factor (lbs/million British thermal units per hour)	Potential to Emit (tons per year)
Benzene	0.000933	0.000654
Toluene	0.000409	0.000287
Xylenes	0.000285	0.000200
Propylene	0.000258	0.000181
1,3-Butadiene	0.000039	0.000027
Formaldehyde	0.001180	0.000827
Acetaldehyde	0.000767	0.000538
Acrolein	0.000093	0.000065
PAH	0.000168	0.000118
Total HAPs		0.002895

Emission Factors from AP-42, Table 3.3-2 (10/96)

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