INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

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: July 8, 2005

RE: Chrome Deposit Corporation / 127-20520-00093

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot 1/10/05

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MINOR SOURCE OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Chrome Deposit Corporation
6640 Melton Road
Portage, Indiana 46368

(herein known as the Permittee) is hereby authorized to 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 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 127-20520-00093	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 8, 2005 Expiration Date: July 8, 2010

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this 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 stationary chromium electroplating source.

Authorized Individual:	Plant Manager
Source Address:	6640 Melton Road, Portage, Indiana 46368
Mailing Address:	6640 Melton Road, Portage, Indiana 46368
General Source Phone:	219 - 763 - 1571
SIC Code:	3471
County Location:	Porter
Source Location Status:	Severe nonattainment area for ozone based on the 1-hour standard Nonattainment area for ozone based on the 8-hour standard Nonattainment area for $PM_{2.5}$ Attainment area for all other criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD and Emission Offset Rules

A.2 Emissions Units and Pollution Control Equipment Summary

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

(a) One (1) hard chromium electroplating tank, identified as Tank B, constructed prior to December 16, 1993 and reconstructed as preventive maintenance in 1999, using a hexavalent chromium bath and having a rectifier capacity of 15,000 amps and a maximum cumulative rectifier capacity of 88,200,000 amp-hours, equipped with an evaporator/cooler and a packed bed/composite mesh pad scrubber as control, and exhausting to stack B.

(b) One (1) hard chromium electroplating tank, identified as Tank C/D, constructed prior to December 16, 1993 and modified in 2001, using a hexavalent chromium bath and having a rectifier capacity of 30,000 amps and a maximum cumulative rectifier capacity of 176,400,000 amp-hours, equipped with an evaporator/cooler and a packed bed/composite mesh pad scrubber as control, and exhausting to stack C/D.

(c) Two (2) wash tanks, identified as Wash Tank B and Wash Tank C/D, using 250 pounds per hour of water and 5 pounds per hour of soap, constructed prior to December 16, 1993.

(d) Two (2) spent wash water holding tanks, identified as Nos. 1 and 2, with associated atmospheric evaporators, exhausting to stacks WR#1 and WR#2.

(e) Three (3) hot water boilers, constructed in 1984, fired by natural gas, with associated heat exchangers, exhausting to stacks B1, B2 and B3, capacity: 0.413 million British thermal units per hour, each.

(f) One (1) forced air furnace, identified as 2FF, maximum heat input capacity: 0.117 million British thermal units per hour.

(g) One (1) forced air furnace, identified as CRF, maximum heat input capacity: 0.075 million British thermal units per hour.

(h) One (1) forced air furnace, identified as LRF, maximum heat input capacity: 0.084 million British thermal units per hour.

(i) One (1) forced air furnace, identified as OF, maximum heat input capacity: 0.054 million British thermal units per hour.

(j) One (1) make-up air heater, identified as Rapid, maximum heat input capacity: 1.75 million British thermal units per hour.

(k) One (1) make-up air heater, identified as Thermo cycler, maximum heat input capacity: 0.4 million British thermal units per hour.

(l) One (1) hot water heater, identified as LRWH, maximum heat input capacity: 0.04 million British thermal units per hour.

(m) One (1) hot water heater, identified as CRWH, maximum heat input capacity: 0.04 million British thermal units per hour.

(n) Two (2) EDT surface machining machines equipped with torit particulate air filters, one exhausting to stack TF and one exhausting inside the building, capacity: 20,000 pounds per hour, each.

(o) One (1) wet finishing surface grinder, capacity: 20,000 pounds per hour.

SECTION B GENERAL 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 operate 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, the applicable definitions found in the statutes or regulations 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 Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating 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 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

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

(d) The notification 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.

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(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

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

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

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

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2] [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 permitted 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, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(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, 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) 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, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 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, OAQ, 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, OAQ, 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.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

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

B.12 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to 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.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 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).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

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

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(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 the 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.7 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

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 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.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]

(a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.11 Compliance Response Plan - Preparation and Implementation

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. The Operation and Maintenance Plan (OMP) required by Condition D.1.6 shall satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation and Maintenance Plan (OMP), the Permittee shall amend its Compliance Response Plan or Operation and Maintenance Plan (OMP) to include such response steps taken.

The Operation and Maintenance Plan (OMP) shall be submitted within the time frames specified by 40 CFR Part 63, Subpart N.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation and Maintenance Plan (OMP); or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation and Maintenance Plan (OMP) is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

(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 emissions unit 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 re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to non-compliant stack tests.

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

Record Keeping and Reporting Requirements

C.13 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 Quality (OAQ) 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 OAQ, 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.14 General Record Keeping Requirements [326 IAC 2-6.1-5]

(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 when operation begins.

C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]

(a) 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

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

(c) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an “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. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description: Chromium Electroplating

(a) One (1) hard chromium electroplating tank, identified as Tank B, constructed prior to December 16, 1993 and reconstructed as preventive maintenance in 1999, using a hexavalent chromium bath and having a rectifier capacity of 15,000 amps and a maximum cumulative rectifier capacity of 88,200,000 amp-hours, equipped with an evaporator/cooler and a packed bed/composite mesh pad scrubber as control, and exhausting to stack B.

(b) One (1) hard chromium electroplating tank, identified as Tank C/D, constructed prior to December 16, 1993 and modified in 2001, using a hexavalent chromium bath and having a rectifier capacity of 30,000 amps and a maximum cumulative rectifier capacity of 176,400,000 amp-hours, equipped with an evaporator/cooler and a packed bed/composite mesh pad scrubber as control, and exhausting to stack C/D.

(c) Two (2) wash tanks, identified as Wash Tank B and Wash Tank C/D, using 250 pounds per hour of water and 5 pounds per hour of soap, constructed prior to December 16, 1993.

(d) Two (2) spent wash water holding tanks, identified as Nos. 1 and 2, with associated atmospheric evaporators, exhausting to stacks WR#1 and WR#2.

(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.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N.

D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1][40 CFR Part 63, Subpart N]

The provisions of the previous version 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to Tanks B and C/D. In addition, pursuant to 40 CFR 63, Subpart N, the current version of the rule also applies to this source.

D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)][40 CFR 63.343(a)(1)&(2)] [326 IAC 20-8]

(a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during times of malfunction.

(b) The hard chromium electroplating tanks, identified as Tanks B and C/D above, are considered a large, existing hard chromium electroplating operation. During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the tanks by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm)[6.6 x 10-6 gr/dscf].

D.1.4 Work Practice Standards [40 CFR 63.342(f)] [326 IAC 20-8]

The following work practice standards apply to Tanks B and C/D:

(a) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain Tanks B and C/D, including the packed bed/ composite mesh pad systems and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.6.

(b) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.6.

(c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

(d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.

(e) Based on the results of the determination made under paragraph (b), IDEM, OAQ may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAQ finds that the plan:

(1) Does not address a malfunction that has occurred;

(2) Pursuant to 326 IAC 20-8, fails to provide for the operation of Tanks B and C/D, the air pollution control techniques, or the packed bed/composite mesh pad systems and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or

(3) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

(f) Pursuant to 40 CFR 63.342(f), based on the results of the determination made under paragraph (b), IDEM, OAQ and US EPA may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAQ or US EPA finds that the plan fails to provide for the proper operation of Tanks B and C/D, the air pollution control techniques, or the packed bed/composite mesh pad systems and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices.

The work practice standards that address operation and maintenance must be followed during malfunctions.

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit is required for these facilities and the packed bed/composite mesh pad systems.

D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)] [326 IAC 20-8]

(a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of the tanks. The OMP shall specify the operation and maintenance criteria for Tanks B and C/D, the packed bed/composite mesh pad

systems, and monitoring equipment, and shall include the following elements:

(1) For the packed bed/composite mesh-pad system (PBS/CMP):

(A) Quarterly visual inspection of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device;

(B) Quarterly visual inspection of the back portion of the mesh pads closest to the fan to ensure there is no breakthrough of chromic acid mist;

(C) Quarterly visual inspection of the duct work from the tanks to the control devices to ensure there are no leaks;

(D) Perform washdown of the composite mesh pads in accordance with manufacturer's recommendations.

(2) A standardized checklist to document the operation and maintenance criteria for Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment;

(3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur;

(4) A systematic procedure for identifying malfunctions and periods of excess of Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.

(b) The Permittee may use applicable standard operating procedures (SOP) manuals, occupational safety and health administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.5, as the OMP provided the alternative plans meet the criteria listed above in Condition D.1.6(a).

(c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or a period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.

(d) If actions taken by the Permittee during periods of malfunction or periods of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ.

(e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ for the life of Tanks B and C/D or until Tanks B and C/D are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMP on record to be made available for inspection, upon request by IDEM, OAQ for a period of five (5) years after each revision to the plan.

Compliance Determination Requirements

D.1.7 Monitoring to Demonstrate Continuous Compliance [40 CFR 63.343 (c)(1)] [326 IAC 20-8]

(a) Performance tests demonstrating initial compliance for tank B were performed on January 6, 1997 and January 7, 1997.

During the initial performance tests, it was determined that the average pressure drop across the system was 1.66 inches of water and the average outlet chromium concentration is 0.0035 mg/dscm.

(b) Performance tests demonstrating initial compliance for tank C/D were performed on December 18, 1996 and December 19, 1996.

During the initial performance tests, it was determined that the average pressure drop across the system was 1.84 inches of water and the average outlet chromium concentration is 0.0014 mg/dscm.

(c) The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the tanks are in compliance. If testing is required by the IDEM, compliance with the limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with the provisions of 40 CFR 63.344 and Section C - Performance Testing.

(d) Pursuant to 40 CFR 63.343(c)(1)(iii), the Permittee may repeat the performance test and establish as a new site-specific pressure drop across the composite mesh-pad system for compliance with 40 CFR 63.343, but not 326 IAC 20-8, according to the requirements of 40 CFR 63.343(c)(1)(i) or (ii). To establish the new site-specific parameter, the Permittee shall:

(1) Determine an outlet chromium concentration using the test methods and procedures in 40 CFR 63.344(c);

(2) Establish the site-specific operating parameter value using the procedures in 40 CFR 63.344(d)(5);

(3) Satisfy the recordkeeping requirements in 40 CFR 63.346(b)(6) through (8); and

(4) Satisfy the reporting requirements in 40 CFR 63.347(d) and (f).

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.343(c)(1)(ii) and (c)(3)] [326 IAC 20-8]

(a) Pursuant to 326 IAC 20-8, when using a packed bed scrubber in conjunction with a composite mesh pad system to comply with the limits specified in Condition D.1.3, the Permittee shall monitor and record the pressure drop across the composite mesh pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh pad systems shall be operated within ± 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests. Compliance with this paragraph will ensure compliance with paragraph (b) of this condition.

(b) Pursuant to 40 CFR 63.343(c)(3) and 63.343(c)(1)(ii), when using a packed bed scrubber in conjunction with a composite mesh pad system to comply with the limits specified in Condition D.1.3, the Permittee shall monitor and record the pressure drop across the

composite mesh pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh pad systems shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests. Compliance with paragraph (a) of this condition will also ensure compliance with this paragraph.

(c) Tank operation or operating time is defined as that time when a part is in the tanks and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operation time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts may be considered operating time.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements [40 CFR 63.346] [326 IAC 20-8]

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6 using the forms provided with this permit. These records shall be maintained in accordance with the Section C condition entitled "General Record Keeping Requirements" of this permit, and include a minimum of the following:

(a) Inspection records for the packed bed/composite mesh pad systems and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.7 and D.1.8 have taken place. The record can take the form of a checklist and should identify the following:

(1) The device inspected;

(2) The date of inspection;

(3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and

(4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.

(b) Records of all maintenance performed on Tanks B and C/D, the packed bed/composite mesh pad systems and monitoring equipment.

(c) Records of the occurrence, duration, and cause (if known) of each malfunction of Tanks B and C/D, the packed bed/composite mesh pad systems and monitoring equipment.

(d) Records of actions taken during periods of malfunction when such actions are inconsistent with the OMP.

(e) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.

(f) Test reports documenting results of all performance tests.

(g) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.

(h) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.

(i) The total process operating times, as defined by D.1.8(b), of each tank (B and C/D), during the reporting period.

(j) Records of the actual cumulative rectifier capacity of each hard chromium electroplating tank expended during each month of the reporting period, and the total capacity expended to date for a reporting period.

(k) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.10.

(l) The Permittee shall maintain a log of any additional inspections prescribed by the Preventive Maintenance Plan.

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

D.1.10 Reporting Requirements [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 & 63.347] [326 IAC 20-8]

The notifications and reports required in this section shall be submitted to IDEM, OAQ using the address specified in Section C - General Reporting Requirements.

(a) Notifications:

(1) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR 63, Subpart N.

(A) The NCS shall be submitted to IDEM, OAQ, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).

(B) The NCS for Tanks B and C/D shall be submitted to IDEM, OAQ immediately.

(2) Notification of Construction or Reconstruction
Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or reconstruct Tanks B and C/D without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ.

(A) The NCR shall contain the information identified in 40 CFR 63.345(b)(2) and (3).

(B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.

(C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct Tanks B and C/D serves as this notification.

(D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ before construction, modification, or reconstruction may commence.

(b) Performance Test Results
The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report
The Permittee shall prepare summary reports to document the ongoing compliance status of Tanks B and C/D using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g) (3).

Because Tanks B and C/D are located at a site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAQ upon request.

(1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).

(A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.

(B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.

(2) If either of the following conditions is met, semiannual reports shall be prepared and submitted to IDEM, OAQ:

(A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.8(b) for the reporting period; or

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.1.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

(3) IDEM, OAQ may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

(d) Pursuant to 40 CFR 63.340(e)(2), the Permittee shall submit a Title V permit application by December 9, 2005.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Combustion

(e) Three (3) hot water boilers, constructed in 1984, fired by natural gas, with associated heat exchangers, exhausting to stacks B1, B2 and B3, capacity: 0.413 million British thermal units per hour, each.

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

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-2-4]

(a) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the three (3) boilers, known as B1, B2 and B3, all constructed in 1984, with a total heat input capacity of 1.24 million British thermal units per hour, shall be no more than 0.6 pound per million British thermal units. This limitation is based upon the following equation:

$Pt = 1.09/Q^{0.26}$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

(b) Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the three (3) boilers are limited to emissions of 0.6 pound per million British thermal units.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Grinding and Machining

(n) Two (2) EDT surface machining machines equipped with torit particulate air filters, one exhausting to stack TF and one exhausting inside the building, capacity: 20,000 pounds per hour, each.

(o) One (1) wet finishing surface grinder, capacity: 20,000 pounds per hour.

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

Emission Limitations and Standards

D.3.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the two (2) EDT machines shall be limited to less than 19.2 pounds per hour, each, when operating of a process weight rate of 20,000 pounds per hour, each.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the wet finishing surface grinder shall be limited to less than 19.2 pounds per hour when operating of a process weight rate of 20,000 pounds per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

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

PART 70 OPERATING PERMIT
CHROMIUM ELECTROPLATING AND ANODIZING NESHAP
ONGOING COMPLIANCE STATUS REPORT
(Complete this form for each affected tank)

Source Name: Chrome Deposit Corporation
Source Address: 6640 Melton Road, Portage, Indiana 46368
Mailing Address: 6640 Melton Road, Portage, Indiana 46368
MSOP No.: 127-20520-00093
Tank ID #: _____
Type of process: Hard Chromium Electroplating
Monitoring Parameter: pressure drop
Parameter Value:
Limits: Total chromium concentration may not exceed 0.015 mg/dscm

This form is to be used to report compliance for the Chromium Electroplating and Anodizing NESHAP only.
The frequency for completing this report may be altered by IDEM, OAQ, Compliance Branch.
Companies classified as an area source: ***Complete this report no later than 30 days after the end of the reporting period, and retain on site unless otherwise notified.***

This form consists of 2 pages **Page 1 of 2**

BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:
TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:

MAJOR AND AREA SOURCES: CHECK ONE
NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:
IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.

JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:
LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.

JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

CHROMIUM ELECTROPLATING AND ANODIZING NESHAP
ONGOING COMPLIANCE STATUS REPORT

ATTACH A SEPARATE PAGE IF NEEDED **Page 2 of 2**

IF THE OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWED, PROVIDE AN EXPLANATION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS TAKEN FOR THAT EVENT:
DESCRIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE THE LAST STATUS REPORT:
ADDITIONAL COMMENTS:

ALL SOURCES: CHECK ONE
I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.
THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Chrome Deposit Corporation**
Address:	**6640 Melton Road**
City:	**Portage**
Phone #:	**219 - 763 - 1571**
MSOP #:	**127-20520-00093**

I hereby certify that Chrome Deposit Corporation is
☐ still in operation.
☐ no longer in operation.

I hereby certify that Chrome Deposit Corporation is
☐ in compliance with the requirements of MSOP 127-20520-00093.
☐ not in compliance with the requirements of MSOP 127-20520-00093.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
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 PERMI 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: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ 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:

_____
_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	**Chrome Deposit Corporation**
Source Location:	**6640 Melton Road, Portage, Indiana 46368**
County:	**Porter**
SIC Code:	**3471**
Operation Permit No.:	**127-11699-00093**
Operation Permit Issuance Date:	**April 20, 2000**
Permit Renewal No.:	**127-20520-00093**
Permit Reviewer:	**CarrieAnn Paukowits**

The Office of Air Quality (OAQ) has reviewed an MSOP Renewal application from Chrome Deposit Corporation relating to the operation of a chromium electroplating source.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) hard chromium electroplating tank, identified as Tank B, constructed prior to December 16, 1993 and reconstructed as preventive maintenance in 1999, using a hexavalent chromium bath and having a rectifier capacity of 15,000 amps and a maximum cumulative rectifier capacity of 88,200,000 amp-hours, equipped with an evaporator/cooler and a packed bed/composite mesh pad scrubber as control, and exhausting to stack B.

(b) One (1) hard chromium electroplating tank, identified as Tank C/D, constructed prior to December 16, 1993 and modified in 2001, using a hexavalent chromium bath and having a rectifier capacity of 30,000 amps and a maximum cumulative rectifier capacity of 176,400,000 amp-hours, equipped with an evaporator/cooler and a packed bed/composite mesh pad scrubber as control, and exhausting to stack C/D.

(c) Two (2) wash tanks, identified as Wash Tank B and Wash Tank C/D, using 250 pounds per hour of water and 5 pounds per hour of soap, constructed prior to December 16, 1993.

(d) Two (2) spent wash water holding tanks, identified as Nos. 1 and 2, with associated atmospheric evaporators, exhausting to stacks WR#1 and WR#2.

(e) Three (3) hot water boilers, constructed in 1984, fired by natural gas, with associated heat exchangers, exhausting to stacks B1, B2 and B3, capacity: 0.413 million British thermal units per hour, each.

(f) One (1) forced air furnace, identified as 2FF, maximum heat input capacity: 0.117 million British thermal units per hour.

(g) One (1) forced air furnace, identified as CRF, maximum heat input capacity: 0.075 million British thermal units per hour.

(h) One (1) forced air furnace, identified as LRF, maximum heat input capacity: 0.084 million British thermal units per hour.

(i) One (1) forced air furnace, identified as OF, maximum heat input capacity: 0.054 million British thermal units per hour.

(j) One (1) make-up air heater, identified as Rapid, maximum heat input capacity: 1.75 million British thermal units per hour.

(k) One (1) make-up air heater, identified as Thermo cycler, maximum heat input capacity: 0.4 million British thermal units per hour.

(l) One (1) hot water heater, identified as LRWH, maximum heat input capacity: 0.04 million British thermal units per hour.

(m) One (1) hot water heater, identified as CRWH, maximum heat input capacity: 0.04 million British thermal units per hour.

(n) Two (2) EDT surface machining machines equipped with torit particulate air filters, one exhausting to stack TF and one exhausting inside the building, capacity: 20,000 pounds per hour, each.

(o) One (1) wet finishing surface grinder, capacity: 20,000 pounds per hour.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

The source has been operating under the previous MSOP 127-11699-00093 issued on April 20, 2000, and the following amendments and revisions:

(a) Notice-only Change 127-12257-00093, issued on July 19, 2000;

(b) Notice-only Change 127-14226-00093, issued on May 18, 2001; and

(c) Notice-only Change 127-18194-00093, issued on February 10, 2004.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the 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 complete application for the purposes of this review was received on December 28, 2004.

Emission Calculations

Chromium emissions (single HAP) from the biggest chromium electroplating source in Indiana are less than ten (10) tons per year and Chrome Deposit Corporation is a much smaller source in comparison. Therefore, no emission calculations were necessary for the chromium electroplating because the chromium emissions from this source will be less than ten (10) tons per year. See Appendix A (pages 1 through 5) of this document for detailed emissions calculations for combustion and machining and grinding operations.

The particulate from the chromium electroplating tanks are calculated as follows (based on AP-42, Table 12.20-1):

Tank B
Potential PM/PM_{10} emissions (lbs/hr) = 0.25 gr/A-hr x 88,200,000 A-hr/yr x 1lb/7,000 gr x 1 ton/2,000 lbs = 1.57 tons/yr

Tank C/D
Potential PM/PM_{10} emissions (lbs/hr) = 0.25 gr/A-hr x 176,400,000 A-hr/yr x 1lb/7,000 gr x 1 ton/2,000 lbs = 3.15 tons/yr

Total potential electroplating PM/PM_{10} emissions = 4.72 tons/yr

Potential to Emit of the Source Before Controls

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, includling 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/yr)
PM	19.7
PM_{10}	19.8
SO_2	0.010
VOC	0.092
CO	1.40
NO_x	1.66

HAPs	Potential to Emit (tons/yr)
Chromium	< 10
Benzene	Negligible
Dichlorobenzene	Negligible
Formaldehyde	Negligible

HAPs	Potential to Emit (tons/yr)
Hexane	0.030
Toluene	Negligible
Lead	Negligible
Cadmium	Negligible
Manganese	Negligible
Nickel	Negligible
Total	< 10.1

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than one hundred (100) tons per year and the potential to emit VOC is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7, Part 70.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7, Part 70.

(c) The existing source is subject to 326 IAC 20-8 but not subject to 326 IAC 2-5.5-1(b)(2), Registration, because the source is not a decorative coating plant. The source is a hard chromium electroplating source and the source emits less than major source levels (see (a) and (b) above). Therefore, the source is subject to the provisions of 326 IAC 2-6.1-3(a).

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 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.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
$PM_{2.5}$	Nonattainment
PM_{10}	Unclassifiable
SO_2	Unclassifiable
NO_2	Attainment
1-Hour Ozone	Severe nonattainment
8-Hour Ozone	Moderate nonattainment

Pollutant	Status
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 standards. Porter County has been designated as 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. Porter 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) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Porter County as nonattainment for $PM_{2.5}$. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's gudiance to regulate PM_{10} emissions as surrogate for $PM_{2.5}$ emissions pursuant to the nonattainment New Source Review requirements.

(c) Porter 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.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	19.7
PM_{10}	19.8
SO_2	0.010
VOC	0.092
CO	1.40
NO_x	1.66
Single HAP	<10
Combination HAPs	<10.1

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of two-hundred fifty (250) tons per year or greater and it is not in one of the twenty-eight (28) listed source categories, no nonattainment regulated pollutant ($PM_{2.5}$ is a subset of PM_{10}) is emitted at a rate of one-hundred (100) tons per year or greater, and no severe nonattainment regulated pollutant is emitted at a rate of twenty-five (25) tons per year or more (VOC for ozone).

(b) Emissions were based on the unrestricted potential to emit of the source.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than one-hundred (100) tons per year,

(b) each severe nonattainment criteria pollutant is less than twenty-five (25) tons per year,

(c) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and

(d) the combination of HAPs is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

(a) There are still no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

(b) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart N.

The hard chrome electroplating tanks, identified as Tank B and Tank C/D, are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63, Subpart N). This subpart was revised on July 19, 2004. However, Pursuant to 326 IAC 1-1-3, the version of the rule referenced by 326 IAC 20-8 was the version in existence on July 1, 2002, which had been most recently amended on December 14, 1999. Therefore, the July 19, 2004, amendments to the federal rule are not approved into the SIP, and the chromium electroplating facilities at this source are subject to both versions of the rule. The rule requirements for the previous version of the rule are specified under “326 IAC 20-8 (Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks)” in the “State Rule Applicability - Individual Facilities” section of this document. When the revised rule is incorporated into the SIP, the Permittee may apply for a revision to the permit to remove any requirements from the previous version of the rule that are not present in the updated version of the rule. All of the requirements of the sections of the federal rule that are applicable to this source are the same as the requirements listed under “326 IAC 20-8” except for the following:

(1) 40 CFR 63.342(f)(2)(ii)(B) now indicates that IDEM, OAQ, and US EPA, may require that the Permittee make changes to the Operation and Maintenance Plan if IDEM, OAQ, or US EPA finds that the plan fails to provide for the proper operations of Tanks B and C/D, the air pollution control techniques, or the packed bed/composite mesh pad systems and process monitoring equipment during a malfunction in a manner consistent with good engineering practices. In the previous version of the rule, that section indicated that IDEM, OAQ, and US EPA may require that the Permittee make changes to the Operation and Maintenance Plan if the plan fails to provide for the operation of Tanks B and C/D, the air pollution control techniques, or the packed bed/composite mesh pad systems and process monitoring equipment during a malfunction in a manner consistent with good engineering practices. Both requirements will be included in the permit.

(2) Paragraph (iii) has been added to 40 CFR 63.343(c)(1). That paragraph indicates that the Permittee may repeat the performance test and establish as a new site-specific pressure drop across the composite mesh-pad system for compliance with 40 CFR 63.343, according to the requirements of 40 CFR 63.343(c)(1)(i) or (ii). This will be included in the permit.

(3) 40 CFR 63.343(c) has also been revised to increase the compliant pressure drop range to ± 2 inch of water column. Compliance with 326 IAC 20-8 (± 1 inch of water column) will ensure compliance with the pressure drop requirement in 40 CFR 63.343(c).

State Rule Applicability – Entire Source

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

The unrestricted potential emissions of each attainment criteria pollutant are less than two-hundred fifty (250) tons per year. Therefore, this source, which is not one of the twenty-eight (28) listed source categories, is a minor source pursuant to 326 IAC 2-2, PSD.

326 IAC 2-3 (Emission Offset)

The unrestricted potential VOC emissions are less than twenty-five (25) tons per year, the unrestricted potential NO_X emissions are less than one-hundred (100) tons per year, and the unrestricted $PM_{2.5}$ emissions ($PM_{2.5}$ is considered a subset of PM_{10} emissions) are less than one-hundred (100) tons per year. Therefore, this source is a minor source pursuant to 326 IAC 2-3, Emission Offset.

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

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

326 IAC 2-6 (Emission Reporting)

This source is located in Porter County, but does not have the potential to emit greater than twenty-five (25) tons per year of NO_X. In addition, this source does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

The three (3) boilers, known as B1, B2 and B3, all constructed in 1984, with a total heat input capacity of 1.24 million British thermal units per hour, must have PM emissions of no more than 0.6 pound per million British thermal units in order to comply 326 IAC 6-2-4. The following equation is given in 326 IAC 6-2-4:

$Pt = 1.09/Q^{0.26}$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

For the three (3) boilers: $Pt = 1.09/(1.24)^{0.26} = 1.03$ lb/MMBtu heat input

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the three (3) boilers are limited to emissions of 0.6 pound per million British thermal units.

Based on Appendix A, the potential PM emission rate is:

The potential PM emissions from the three (3) boilers limited to 0.6 pound PM per million British thermal units are:

0.010 tons/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.002 lbs/hr
(0.002 lbs/hr / 1.24 MMBtu/hr) = 0.002 lbs PM per MMBtu

Therefore, the three (3) boilers will comply with this rule.

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

(a) Pursuant to 326 IAC 6-3-1(c)(6), this rule is not applicable to the chromium electroplating operations because a particulate limit for the electroplating is established in 326 IAC 20-8-1.

(b) The particulate emissions from each of the two (2) EDT machines shall be limited to less than 19.2 pounds per hour, each, when operating of a process weight rate of 20,000 pounds per hour, each. Since the potential to emit PM before controls are 1.71 pounds per hour, each, the two (2) EDT machines will comply with this rule without controls.

(c) The particulate emissions from the wet finishing surface grinder shall be limited to less than 19.2 pounds per hour when operating of a process weight rate of 20,000 pounds per hour. Since the potential to emit PM before controls is 0.00017 pounds per hour, the surface grinder will comply with this rule without controls.

These limitations are based upon the following:

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

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

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential SO_2 emissions from the facilities at this source are less than ten (10) pounds per hour and twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 are not applicable.

326 IAC 20-1-1 (Incorporation of federal regulations)

The chromium electroplating operations, subject to 326 IAC 20-8, are required to comply with 40 CFR 63, Subpart A, concerning general provisions for emission standards for hazardous air pollutants.

326 IAC 20-8 (Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks)

The chromium electroplating operations are required to comply with 40 CFR 63, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Electroplating and Anodizing Tanks. Pursuant to 326 IAC 1-1-3, the version of the rule referenced was the version in existence on July 1, 2002, which was the final rule, most recently amended on December 14, 1999. Therefore, the July 19, 2004, amendments to the federal rule are not approved into the SIP, and the chromium electroplating operations are subject to the previous version of the rule, as included in the initial MSOP. The requirements are as follows:

(a) Emissions Limitations

The hard chromium electroplating tanks, identified as B and C/D, are considered a large, existing hard chromium electroplating operation because the facilities have maximum cumulative potential rectifier capacities greater than or equal to 60 million ampere-hours per year (amp-hr/yr). Pursuant to 40 CFR 63.342(c)(1), during tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the tanks by not allowing the concentration of total chromium in the exhaust gas stream discharged

to the atmosphere to exceed 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm)[6.6 x 10-6 gr/dscf]. The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during times of malfunction.

(b) Work Practice Standards

(1) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain Tanks B and C/D, including the packed bed/composite mesh pad systems and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP).

(2) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the OMP.

(3) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

(4) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.

(5) IDEM, OAQ may require that the Permittee make changes to the OMP. Revisions may be required if IDEM, OAQ finds that the plan:

(A) Does not address a malfunction that has occurred;

(B) Fails to provide for the operation of Tanks B and C/D, the air pollution control techniques, or the packed bed/composite mesh pad systems and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices;

(C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

The work practice standards that address operation and maintenance must be followed during malfunctions.

(c) Operation and Maintenance Plan

(1) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of the tanks. The OMP shall specify the operation and maintenance criteria for Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment, and shall include the following elements:

(A) For the packed bed/composite mesh-pad system (PBS/CMP):

(i) Quarterly visual inspection of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no

evidence of chemical attack on the structural integrity of the device;

(ii) Quarterly visual inspection of the back portion of the mesh pads closest to the fan to ensure there is no breakthrough of chromic acid mist;

(iii) Quarterly visual inspection of the duct work from the tanks to the control devices to ensure there are no leaks;

(iv) Perform washdown of the composite mesh pads in accordance with manufacturer's recommendations.

(B) A standardized checklist to document the operation and maintenance criteria for Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment;

(C) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur;

(D) A systematic procedure for identifying malfunctions and periods of excess of Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.

(2) The Permittee may use applicable standard operating procedures (SOP) manuals, occupational safety and health administration (OSHA) plans, or other existing plans such as the PMP, as the OMP provided the alternative plans meet the criteria listed above.

(3) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or a period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining Tanks B and C/D, the packed bed/composite mesh pad systems, and monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.

(4) If actions taken by the Permittee during periods of malfunction or periods of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ.

(5) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ for the life of Tanks B and C/D or until Tanks B and C/D are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMP on record to be made available for inspection, upon request by IDEM, OAQ for a period of five (5) years after each revision to the plan.

(d) Monitoring to Demonstrate Continuous Compliance

(1) Performance tests demonstrating initial compliance for tank B were performed on January 6, 1997 and January 7, 1997. During the initial performance tests, it was determined that the average pressure drop across the system was 1.66 inches of water and the average outlet chromium concentration is 0.0035 mg/dscm.

(2) Performance tests demonstrating initial compliance for tank C/D were performed on December 18, 1996 and December 19, 1996. During the initial performance tests, it was determined that the average pressure drop across the system was 1.84 inches of water and the average outlet chromium concentration is 0.0014 mg/dscm.

(3) The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the tanks are in compliance. If testing is required by the IDEM, compliance with the limits specified in paragraph (a), above, shall be determined by a performance test conducted in accordance with the provisions of 40 CFR 63.344 and Section C - Performance Testing.

(4) Pursuant to 326 IAC 20-8, when using a packed bed scrubber in conjunction with a composite mesh pad system to comply with the limits specified above, the Permittee shall monitor and record the pressure drop across the composite mesh pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh pad systems shall be operated within ± 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.

(5) Tank operation or operating time is defined as that time when a part is in the tanks and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operation time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts may be considered operating time.

(e) Record Keeping Requirements

The Permittee shall maintain records to document compliance with this rule using the forms provided with the permit. These records shall include a minimum of the following:

(1) Inspection records for the packed bed/composite mesh pad systems and monitoring equipment to document that the inspection and maintenance required have taken place. The record can take the form of a checklist and should identify the following:

(A) The device inspected;

(B) The date of inspection;

(C) A brief description of the working condition of the device during the inspection, including any deficiencies found; and

(D) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.

(2) Records of all maintenance performed on Tanks B and C/D, the packed bed/ composite mesh pad systems and monitoring equipment.

(3) Records of the occurrence, duration, and cause (if known) of each malfunction of Tanks B and C/D, the packed bed/composite mesh pad systems and monitoring equipment.

(4) Records of actions taken during periods of malfunction when such actions are inconsistent with the OMP.

(5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.

(6) Test reports documenting results of all performance tests.

(7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.

(8) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.

(9) The total process operating times of each tank (B and C/D), during the reporting period.

(10) Records of the actual cumulative rectifier capacity of each hard chromium electroplating tank expended during each month of the reporting period, and the total capacity expended to date for a reporting period.

(11) All documentation supporting the notifications and reports required.

(f) Reporting Requirements

(1) Notifications:

(A) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR 63, Subpart N.

(i) The NCS shall be submitted to IDEM, OAQ, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).

(ii) The NCS for Tanks B and C/D shall be submitted to IDEM, OAQ immediately.

(B) Notification of Construction or Reconstruction

Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or reconstruct Tanks B and C/D without sub-

mitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ.

(i) The NCR shall contain the information identified in 40 CFR 63.345(b)(2) and (3).

(ii) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.

(iii) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks B and C/D serves as this notification.

(iv) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ before construction, modification, or reconstruction may commence.

(2) Performance Test Results
The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(3) Ongoing Compliance Status Report
The Permittee shall prepare summary reports to document the ongoing compliance status of Tanks B and C/D using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because Tanks B and C/D are located at a site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAQ upon request.

(A) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided below.

(i) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.

(ii) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.

(B) If either of the following conditions is met, semiannual reports shall be prepared and submitted to IDEM, OAQ:

(i) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.8(b) for the reporting period; or

(ii) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.1.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

(C) IDEM, OAQ may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

(g) Pursuant to 40 CFR 63.340(e)(2), a source subject to Subpart N is also subject to the Title V permitting requirements. IDEM, OAQ, has granted a deferral under this rule until December 9, 2004, for sources that are not located at a major source and are not otherwise required to obtain a Title V permit. Therefore, the Permittee must submit a Title V permit application by December 9, 2005. On March 25, 2005, the U.S. EPA proposed to exempt all sources that are subject to a NESHAP, but are not major sources from Title V permitting requirements. If that rule becomes final, the Permittee will not be required to submit a Title V permit application and the Permittee should apply for a Notice Only Change to Condition D.1.10 of the permit.

Compliance Requirements

Compliance monitoring is required for the two (2) hard chromium electroplating tanks, identified as B and C/D, in order to ensure that the packed bed scrubber in conjunction with a composite mesh pad system is operating properly at all times. The packed bed scrubber/composite mesh pad system must operate properly to in order for the two (2) hard chromium electroplating tanks to comply with 326 IAC 20-8 and 40 CFR 63, Subpart N. The following compliance monitoring conditions are applicable:

(a) Pursuant to 326 IAC 20-8, when using a packed bed scrubber in conjunction with a composite mesh pad system to comply with the limits specified in the permit, the Permittee shall monitor and record the pressure drop across the composite mesh pad system during tank operation once each day that the hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh pad systems shall be operated within ± 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests. Compliance with this paragraph will ensure compliance with paragraph (b).

(b) Pursuant to 40 CFR 63.343(c)(3) and 63.343(c)(1)(ii), when using a packed bed scrubber in conjunction with a composite mesh pad system to comply with the limits specified in the permit, the Permittee shall monitor and record the pressure drop across the composite mesh pad system during tank operation once each day that the hard chromium

electroplating tank is operating. To be in compliance with the standards, the composite mesh pad systems shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests. Compliance paragraph (a) will ensure compliance with this paragraph.

(c) Tank operation or operating time is defined as that time when a part is in the tanks and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operation time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts may be considered operating time.

Conclusion

The operation of this chromium electroplating source shall be subject to the conditions of the **Minor Source Operating Permit Renewal 127-20520-00093.**

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Minor Source Operating Permit (MSOP) Renewal

Source Name:	**Chrome Deposit Corporation**
Source Location:	**6640 Melton Road, Portage, Indiana 46368**
County:	**Porter**
MSOP No.:	**MSOP 127-20520-00093**
SIC Code:	**3471**
Permit Reviewer:	**CarrieAnn Paukowits/MES**

On May 26, 2005, the Office of Air Quality (OAQ) had a notice published in The Times, Munster, Indiana, stating that Chrome Deposit Corporation had applied for an Operating Permit Renewal to continue to operate a chromium electroplating source with evaporator/ coolers and packed bed/composite mesh pad scrubbers as controls. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 27, 2005, Ronald A. Bahr of Liberty Engineering, Inc., on behalf of Chrome Deposit Corporation, submitted a comment on the proposed operating permit. The comment is as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.):

Comment 1:

Referring to the variation between the final federal rule setting a limit of plus or minus two inches of water versus the state rule incorporating the former federal limit of plus or minus one inch of water on page 6 in paragraph (b) of the TSD under the heading, Federal Rule Applicability, we have,

> "When the revised rule is incorporated into the SIP, the Permittee may apply for a revision to the permit to remove any requirements from the previous version of the rule that are not present in the updated version of the rule."

Referring to the proposed federal rule and the state rule regarding area sources on page 15 of the TSD, in paragraph (g) we have,

> "If that rule becomes final, the Permittee will not be required to submit a Title V permit application and the Permittee should apply for a Notice Only Change to Condition D.1.10 of the permit."

We would like to see both of these conditions utilize the Notice Only Change procedure to avoid additional paperwork. We feel that these are similar conditions which do not warrant a full permit revision application.

Response 1:

Neither of the above statements is a permit condition. They are supporting information contained in the Technical Support Document (TSD) only. Pursuant to 326 IAC 2-6.1-6(d)(8), the following change is a notice-only change:

> "Incorporation of newly-applicable monitoring or testing requirements specified in 40 CFR 60, 40 CFR 61, or 40 CFR 63 that apply as the result of a change in applicability of those requirements to the source, including the removal from the permit of monitoring or testing requirements that no longer apply as a result of the change in applicability."

Therefore, the removal of the monitoring required by the previous version of 40 CFR 63, Subpart N, would be a notice-only change, since that version of the rule would not be applicable to the source after the new version of the rule is incorporated into the SIP. However, these statements will not be added as permit conditions. Those future changes to the permit will be reviewed based upon the rules in place when the applications are received by IDEM, OAQ. There are no changes to the permit.

Appendix A: Emission Calculations
Process Operations

Company Name: **Chrome Deposit Corporation**
Address City IN Zip: **6640 Melton Road, Portage, Indiana 46368**
MSOP Renewal: **127-20520**
Plt ID: **127-00093**
Reviewer: **CarrieAnn Paukowits**
Date: **December 28, 2004**

Emission Unit	Torit Filter	Stack	Flow Rate (acfm)	Outlet Grain Loading (gr/acfm)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	Control Efficiency	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)	Process Weight Rate (lbs/hr)	Allowable Emissions (lbs/hr)
EDT machine	TF	TF	1000	0.002	0.017	0.075	99.0%	1.71	7.51	20000	19.2
EDT machine	TF	inside	1000	0.002	0.017	0.075	99.0%	1.71	7.51	20000	19.2
					0.034	0.150		3.43	15.0		

Emission Unit		Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)	Process Weight Rate (lbs/hr)	Allowable Emissions (lbs/hr)
Wet Surface Grinder		1.70E-04	7.45E-04	20000	19.2

Methodology

Controlled Emissions (lbs/hr) = gr/acfm x acfm x 60 minutes/hr / 7000 gr/lb
Uncontrolled Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1 - Control Efficiency)
Emissions (tons/yr) = Emissions (lbs/hr) * 8760 hrs/yr / 2000 lbs/ton
Allowable Emissions (lbs/hr) = 4.10 x (Process weight (lbs/hr) / 2000 lbs/ton)^0.67 [326 IAC 6-3-2]
Wet Surface Grinder emissions are from MSOP 127-11699-00093, issued on April 20, 2000.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Chrome Deposit Corporation**
Address City IN Zip: **6640 Melton Road, Portage, Indiana 46368**
MSOP Renewal: **127-20520**
Plt ID: **127-00093**
Reviewer: **CarrieAnn Paukowits**
Date: **December 28, 2004**

Four (4) furnaces, two (2) makeup air heaters and two (2) hot water heaters.

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.56	22.43

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.021	0.085	0.007	1.12	0.062	0.942

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Chrome Deposit Corporation**
Address City IN Zip: **6640 Melton Road, Portage, Indiana 46368**
MSOP Renewal: **127-20520**
Plt ID: **127-00093**
Reviewer: **CarrieAnn Paukowits**
Date: **December 28, 2004**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.355E-05	1.346E-05	8.410E-04	2.018E-02	3.812E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	5.606E-06	1.233E-05	1.570E-05	4.261E-06	2.355E-05	0.048

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Chrome Deposit Corporation**
Address City IN Zip: **6640 Melton Road, Portage, Indiana 46368**
MSOP Renewal: **127-20520**
Plt ID: **127-00093**
Reviewer: **CarrieAnn Paukowits**
Date: **December 28, 2004**

Three (3) Boilers

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
1.24	10.85

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.010	0.041	0.003	0.543	0.030	0.456

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Chrome Deposit Corporation**
Address City IN Zip: **6640 Melton Road, Portage, Indiana 46368**
MSOP Renewal: **127-20520**
Plt ID: **127-00093**
Reviewer: **CarrieAnn Paukowits**
Date: **December 28, 2004**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.140E-05	6.512E-06	4.070E-04	9.768E-03	1.845E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.713E-06	5.970E-06	7.598E-06	2.062E-06	1.140E-05	0.026

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.