INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 12, 2012

RE: K & I Hard Chrome, Inc. / 043-31142-00052

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted 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, Suite N 501E, 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.dot12/03/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

K & I Hard Chrome, Inc.
1900 East Main Street
New Albany, Indiana 47150

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M043-31142-00052	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: April 12, 2012 Expiration Date: April 12, 2022

TABLE OF CONTENTS

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

B. GENERAL CONDITIONS 6
B.1 Definitions [326 IAC 2-1.1-1]
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]
B.3 Term of Conditions [326 IAC 2-1.1-9.5]
B.4 Enforceability
B.5 Severability
B.6 Property Rights or Exclusive Privilege
B.7 Duty to Provide Information
B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]
B.9 Preventive Maintenance Plan [326 IAC 1-6-3]
B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]
B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]
B.12 Permit Renewal [326 IAC 2-6.1-7]
B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]
B.14 Source Modification Requirement
B.15 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] [IC 13-17-3-2][IC 13-30-3-1]
B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]
B.17 Annual Fee Payment [326 IAC 2-1.1-7]
B.18 Credible Evidence [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS 11

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
C.2 Permit Revocation [326 IAC 2-1.1-9]
C.3 Opacity [326 IAC 5-1]
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.6 Fugitive Dust Emissions [326 IAC 6-4]
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-6.1-5(a)(2)]
C.8 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]
C.9 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]
C.10 Compliance Monitoring [326 IAC 2-1.1-11]
C.11 Instrument Specifications [326 IAC 2-1.1-11]

Corrective Actions and Response Steps
C.12 Response to Excursions or Exceedances
C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]
C.14 Malfunctions Report [326 IAC 1-6-2]
C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]
C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

D.1. EMISSIONS UNIT OPERATION CONDITIONS Hard chromium electroplating tanks (#31, #32, #33, #41, #42, #43, #44, #45, and #46) 17

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]
D.1.1 Preventive Maintenance Plan [326 IAC 1-6-3]

D.2 EMISSIONS UNIT OPERATION CONDITIONS - 4.718 MMBtu Natural Gas Fired Boiler..... 18

Emission Limitations and Standards
D.2.1 Particulate [326 IAC 6-2-4]

E.1 EMISSIONS UNIT OPERATION CONDITIONS..... 19
E.1.1 General Provisions Relating to HAP [326 IAC 20-1-1] [40 CFR 63, Subpart A]
E.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR 63, Subpart N]

E.2 EMISSIONS UNIT OPERATION CONDITIONS..... 21
E.2.1 General Provisions Relating to HAP [326 IAC 20-1-1] [40 CFR 63, Subpart A]
E.2.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR 63, Subpart N]

Annual Notification 23
Malfunction Report 24
Ongoing Compliance Forms (Chromium Electroplating and Anodizing NESHAP).....26

Attachment A - NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks - Subpart N

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 hard and decorative chromium electroplating source.

Source Address:	1900 East Main Street, New Albany, Indiana 47150
General Source Phone Number:	812-948-1166
SIC Code:	3471 (Electroplating, Plating, Polishing, Anodizing, and Coloring)
County Location:	Floyd
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) Hard Chromium Electroplating Operation (identified as System #2) with a maximum cumulative rectifier capacity of 170,520,000 Ampere-hours (A-hr) per year consisting of:

Six (6) hard chromium electroplating tanks, identified as #41, #42, #43, #44, #45 and #46, equipped with a composite mesh pad system, and exhausting to one (1) stack, identified as #2.

Tanks #41, #42, and #45 were constructed in June 1988.

Tank #43 was constructed in January 1989 and tank #46 was constructed in January 1990.

Under National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), hard chromium electroplating tanks #41, #42, #43, #44, #45, and #46 are considered large hard chromium electroplating tanks.

(b) One (1) Decorative Chromium Electroplating Operation (identified as System #4) with a maximum cumulative rectifier capacity of 23,520,000 Ampere-hours (A-hr) per year consisting of:

One (1) decorative chromium electroplating tank, identified as #5, constructed in September 2001, using a hexavalent chromium bath, equipped with a combination wetting agent type fume suppressant and foam blanket.

Under National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), chromium tank #5 is considered a small decorative chromium electroplating tank.

(c) Three (3) electroless nickel plating systems, identified as #1, #2 and #3, using three (3) exhaust fans for control, exhausting to three (3) stacks identified as #4, #5 and #6.

(d) One (1) natural gas fired boiler, identified as Main Boiler, with a maximum heat input rate of 4.718 million (MM) British thermal units (Btu) per hour, exhausting through one (1) stack identified as #7.

(e) One (1) natural gas fired gas burner for tank, identified as Black Oxide, with a maximum heat input rate of 0.30 MMBtu per hour, exhausting through one (1) stack identified as #8.

(f) One (1) natural gas fired gas burner oven, identified as Oven, with a maximum heat input rate of 0.70 MMBtu per hour, exhausting through one (1) stack identified as #9.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M043-31142-00052, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual 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) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

(c) 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.9 Preventive Maintenance Plan [326 IAC 1-6-3]

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

(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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M043-31142-00052 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

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

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 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][IC 13-17-3-2][IC 13-30-3-1]

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

(a) Enter upon the Permittee's premises where a 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 the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, 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.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.

(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.18 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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

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

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

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

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

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

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.6 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.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

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

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

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

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test 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 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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 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.11 Instrument Specifications [326 IAC 2-1.1-11]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

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

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

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

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

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

(e) The Permittee shall record the reasonable response steps taken.

C.13 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

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

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

C.14 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.15 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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of

permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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) 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 UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) Hard Chromium Electroplating Operation (identified as System #2) with a maximum cumulative rectifier capacity of 170,520,000 Ampere-hours (A-hr) per year consisting of:

Six (6) hard chromium electroplating tanks, identified as #41, #42, #43, #44, #45 and #46, equipped with a composite mesh pad system, and exhausting to one (1) stack, identified as #2.

Tanks #41, #42, and #45 were constructed in June 1988.

Tank #43 was constructed in January 1989 and tank #46 was constructed in January 1990.

Under National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), hard chromium electroplating tanks #41, #42, #43, #44, #45, and #46 are considered large hard chromium electroplating tanks

(b) One (1) Decorative Chromium Electroplating Operation (identified as System #4) with a maximum cumulative rectifier capacity of 23,520,000 Ampere-hours (A-hr) per year consisting of:

One (1) decorative chromium electroplating tank, identified as #5, constructed in September 2001, using a hexavalent chromium bath, equipped with a combination wetting agent type fume suppressant and foam blanket.

Under National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), chromium tank #5 is considered a small decorative chromium electroplating tank.

(c) Three (3) electroless nickel plating systems, identified as #1, #2 and #3, using three (3) exhaust fans for control, exhausting to three (3) stacks identified as #4, #5 and #6.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) natural gas fired boiler, identified as Main Boiler, with a maximum heat input rate of 4.718 million (MM) British thermal units (Btu) per hour, exhausting through one (1) stack identified as #7.

(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]

Pursuant to 326 IAC 6-2-4(a) (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 4.718 MMBtu per hour heat input boiler shall be limited to 0.6 pounds per MMBtu heat input.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) Hard Chromium Electroplating Operation (identified as System #2) with a maximum cumulative rectifier capacity of 170,520,000 Ampere-hours (A-hr) per year consisting of:

Six (6) hard chromium electroplating tanks, identified as #41, #42, #43, #44, #45 and #46, equipped with a composite mesh pad system, and exhausting to one (1) stack, identified as #2.

Tanks #41, #42, and #45 were constructed in June 1988.

Tank #43 was constructed in January 1989 and tank #46 was constructed in January 1990.

Under National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), hard chromium electroplating tanks #41, #42, #43, #44, #45, and #46 are considered large hard chromium electroplating tanks.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.340, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the hard chrome electroplating tanks, identified as #41, #42, #43, #44, #45, and #46, except as otherwise specified in 40 CFR 63, Subpart N.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 National Emission Standards (NESHAP) for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements [40 CFR Part 63, Subpart N] [326 IAC 20-8-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart N (included as Attachment A of this permit) which are incorporated by references as 326 IAC 20-8-1, except as otherwise specified in 40 CFR Part 63, Subpart N:

(1) 40 CFR 63.340 (a).
(2) 40 CFR 63.340 (b).

(3) 40 CFR 63.340 (c).
(4) 40 CFR 63.340 (e).
(5) 40 CFR 63.341.
(6) 40 CFR 63.342 (a).
(7) 40 CFR 63.342 (b)(1).
(8) 40 CFR 63.342 (b)(2)(i).
(9) 40 CFR 63.342 (c)(1)(i).
(10) 40 CFR 63.342 (f)(1).
(11) 40 CFR 63.342 (f)(2).
(12) 40 CFR 63.342 (f)(3)(i).
(13) 40 CFR 63.342 (f)(3)(ii).
(14) 40 CFR 63.342 (f)(3)(iii).
(15) 40 CFR 63.342 (f)(3)(iv).
(16) 40 CFR 63.342 (f)(3)(v).
(17) 40 CFR 63.342 (f)(3)(vi).
(18) 40 CFR 63.342 (g).
(19) Table 1 CMP System
(20) Table 1 Stalagmometer Requirement
(21) 40 CFR 63.343 (a)(1)(ii).
(22) 40 CFR 63.343 (a)(3).
(23) 40 CFR 63.343 (a)(5).
(24) 40 CFR 63.343 (a)(6).
(25) 40 CFR 63.343 (c)(1).
(26) 40 CFR 63.343 (d).
(27) 40 CFR 63.344 (a).
(28) 40 CFR 63.344 (b)(1).
(29) 40 CFR 63.344 (b)(2).
(30) 40 CFR 63.344 (d)(1).
(31) 40 CFR 63.344 (d)(2)(ii).
(32) 40 CFR 63.344 (d)(5).
(33) 40 CFR 63.346 (a).
(34) 40 CFR 63.346 (b)(1).
(35) 40 CFR 63.346 (b)(2).
(36) 40 CFR 63.346 (b)(3).
(37) 40 CFR 63.346 (b)(4).
(38) 40 CFR 63.346 (b)(5).
(39) 40 CFR 63.346 (b)(6).
(40) 40 CFR 63.346 (b)(7).
(41) 40 CFR 63.346 (b)(8).
(42) 40 CFR 63.346 (b)(9).
(43) 40 CFR 63.346 (b)(10).
(44) 40 CFR 63.346 (b)(11).
(45) 40 CFR 63.346 (b)(12).
(46) 40 CFR 63.346 (b)(16).
(47) 40 CFR 63.346 (c).
(48) 40 CFR 63.347 (a).
(49) 40 CFR 63.347 (b).
(50) 40 CFR 63.347 (d).
(51) 40 CFR 63.347 (e). (excluding viii)
(52) 40 CFR 63.347 (f).
(53) 40 CFR 63.347 (h).
(54) 40 CFR 63.348.

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) Decorative Chromium Electroplating Operation (identified as System #4) with a maximum cumulative rectifier capacity of 23,520,000 Ampere-hours (A-hr) per year consisting of:

One (1) decorative chromium electroplating tank, identified as #5, constructed in September 2001, using a hexavalent chromium bath, equipped with a combination wetting agent type fume suppressant and foam blanket.

Under National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), decorative chromium tank #5 is considered small decorative chromium electroplating tank.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5]

E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.340, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the decorative chrome electroplating tank, identified as #5, except as otherwise specified in 40 CFR Part 63, Subpart N.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.2.2 National Emission Standards (NESHAP) for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements [40 CFR Part 63, Subpart N] [326 IAC 20-8-1]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart N (included as Attachment A of this permit) which are incorporated by references as 326 IAC 20-8-1, except as otherwise specified in 40 CFR Part 63, Subpart N:

(1) 40 CFR 63.340 (a).
(2) 40 CFR 63.340 (b).
(3) 40 CFR 63.340 (c).
(4) 40 CFR 63.340 (e).
(5) 40 CFR 63.341.
(6) 40 CFR 63.342 (a).
(7) 40 CFR 63.342 (b)(1).
(8) 40 CFR 63.342 (d)(1).

(9) 40 CFR 63.342 (d)(2).
(10) 40 CFR 63.342 (f)(1).
(11) 40 CFR 63.342 (f)(2).
(12) 40 CFR 63.342 (f)(3)(i)(A).
(13) 40 CFR 63.342 (f)(3)(i)(B).
(14) 40 CFR 63.342 (f)(3)(i)(C).
(15) 40 CFR 63.342 (f)(3)(i)(D).
(16) 40 CFR 63.342 (f)(3)(i)(E).
(17) 40 CFR 63.342 (f)(3)(ii).
(18) 40 CFR 63.342 (f)(3)(iii).
(19) 40 CFR 63.342 (f)(3)(iv).
(20) 40 CFR 63.342 (f)(3)(v).
(21) 40 CFR 63.342 (f)(3)(vi).
(22) 40 CFR 63.342 (g).
(23) Table 1 Stalagmometer Requirement
(24) 40 CFR 63.343 (a)(1)(i).
(25) 40 CFR 63.343 (a)(3).
(26) 40 CFR 63.343 (a)(6).
(27) 40 CFR 63.343 (b)(2)(i).
(28) 40 CFR 63.343 (b)(2)(ii).
(29) 40 CFR 63.343 (b)(2)(iii).
(30) 40 CFR 63.343 (c)(5).
(31) 40 CFR 63.346 (a).
(32) 40 CFR 63.346 (b)(1).
(33) 40 CFR 63.346 (b)(2).
(34) 40 CFR 63.346 (b)(3).
(35) 40 CFR 63.346 (b)(4).
(36) 40 CFR 63.346 (b)(5).
(37) 40 CFR 63.346 (b)(6).
(38) 40 CFR 63.346 (b)(7).
(39) 40 CFR 63.346 (b)(8).
(40) 40 CFR 63.346 (b)(9).
(41) 40 CFR 63.346 (b)(10).
(42) 40 CFR 63.346 (b)(11).
(43) 40 CFR 63.346 (b)(13).
(44) 40 CFR 63.346 (b)(16).
(45) 40 CFR 63.346 (c).
(46) 40 CFR 63.347 (a).
(47) 40 CFR 63.347 (b).
(48) 40 CFR 63.347 (d).
(49) 40 CFR 63.347 (e).
(50) 40 CFR 63.347 (f).
(51) 40 CFR 63.347 (h).
(52) 40 CFR 63.348.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT 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:	K & I Hard Chrome, Inc.
Address:	1900 East Main Street
City:	New Albany, Indiana 47150
Phone #:	812-948-1166
MSOP #:	M043-31142-00052

I hereby certify that K & I Hard Chrome, Inc. is:
☐ still in operation.
☐ no longer in operation.

I hereby certify that K & I Hard Chrome, Inc. is:
☐ in compliance with the requirements of MSOP M043-31142-00052.
☐ not in compliance with the requirements of MSOP M043-31142-00052.

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
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865

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 ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

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

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

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

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

DATE/TIME MALFUNCTION STARTED: _____/_____/ 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
COMPLIANCE AND ENFORCEMENT BRANCH

CHROMIUM ELECTROPLATING AND ANODIZING NESHAP
ONGOING COMPLIANCE STATUS REPORT

Source Name:	K & I Hard Chrome, Inc.
Source Address:	1900 East Main Street, New Albany, Indiana 47150
MSOP Permit No.:	M043-31142-00052
Tank ID #:	#41, #42, #43, #44, #45, and #46
Type of process:	Large hard chromium electroplating operations
Monitoring Parameter:	Pressure drop across the composite mesh pad system
Parameter Value:	+/- 1 inch of water column of the pressure drop value (average pressure drop value = 2.8 inches of water)
Limits:	Total chromium concentration may not exceed 0.015 mg/dscm (average chromium concentration = 0.0056 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 a major source: ***Submit this report no later than 30 days after the end of the reporting period.***
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
9 NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
9 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
9 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.
9 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:

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

CHROMIUM ELECTROPLATING AND ANODIZING NESHAP
ONGOING COMPLIANCE STATUS REPORT

Source Name:	K & I Hard Chrome, Inc.
Source Address:	1900 East Main Street, New Albany, Indiana 47150
MSOP Permit No.:	M043-31142-00052
Tank ID #:	#5
Type of process:	Small decorative chromium electroplating
Monitoring Parameter:	Surface tension of the electroplating or anodizing bath
Parameter Value:	The surface tension of the electroplating or anodizing bath shall not exceed 35 dynes per centimeter when using a tensiometer and 45 dynes per centimeter when using a stalagmometer (average surface tension = 20 dynes per cm for tank #5)
Limits:	Total chromium concentration may not exceed 0.01 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 a major source: ***Submit this report no later than 30 days after the end of the reporting period.***
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
9 NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
9 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
9 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.
9 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:

Attachment A

K & I Hard Chrome, Inc.
1900 East Main Street
New Albany, Indiana 47150

Permit No. M043-31142-00052

Title 40: Protection of Environment

Part 63 - National Emission Standards for Hazardous Air Pollutants

Subpart N—National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart N—National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

Source: 60 FR 4963, Jan. 25, 1995, unless otherwise noted.

§ 63.340 Applicability and designation of sources.

(a) The affected source to which the provisions of this subpart apply is each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing.

(b) Owners or operators of affected sources subject to the provisions of this subpart must also comply with the requirements of subpart A of this part, according to the applicability of subpart A of this part to such sources, as identified in Table 1 of this subpart.

(c) Process tanks associated with a chromium electroplating or chromium anodizing process, but in which neither chromium electroplating nor chromium anodizing is taking place, are not subject to the provisions of this subpart. Examples of such tanks include, but are not limited to, rinse tanks, etching tanks, and cleaning tanks. Likewise, tanks that contain a chromium solution, but in which no electrolytic process occurs, are not subject to this subpart. An example of such a tank is a chrome conversion coating tank where no electrical current is applied.

(d) Affected sources in which research and laboratory operations are performed are exempt from the provisions of this subpart when such operations are taking place.

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

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 64 FR 69643, Dec. 14, 1999; 70 FR 75345, Dec. 19, 2005]

§ 63.341 Definitions and nomenclature.

(a) *Definitions.* Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section. For the purposes of subpart N of this part, if the same term is defined in subpart A of this part and in this section, it shall have the meaning given in this section.

Add-on air pollution control device means equipment installed in the ventilation system of chromium electroplating and anodizing tanks for the purposes of collecting and containing chromium emissions from the tank(s).

Air pollution control technique means any method, such as an add-on air pollution control device or a chemical fume suppressant, that is used to reduce chromium emissions from chromium electroplating and chromium anodizing tanks.

Base metal means the metal or metal alloy that comprises the workpiece.

Bath component means the trade or brand name of each component(s) in trivalent chromium plating baths. For trivalent chromium baths, the bath composition is proprietary in most cases. Therefore, the trade or brand name for

each component(s) can be used; however, the chemical name of the wetting agent contained in that component must be identified.

Chemical fume suppressant means any chemical agent that reduces or suppresses fumes or mists at the surface of an electroplating or anodizing bath; another term for fume suppressant is mist suppressant.

Chromic acid means the common name for chromium anhydride (CrO_3).

Chromium anodizing means the electrolytic process by which an oxide layer is produced on the surface of a base metal for functional purposes (e.g., corrosion resistance or electrical insulation) using a chromic acid solution. In chromium anodizing, the part to be anodized acts as the anode in the electrical circuit, and the chromic acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

Chromium anodizing tank means the receptacle or container along with the following accompanying internal and external components needed for chromium anodizing: rectifiers fitted with controls to allow for voltage adjustments, heat exchanger equipment, circulation pumps, and air agitation systems.

Chromium electroplating tank means the receptacle or container along with the following internal and external components needed for chromium electroplating: Rectifiers, anodes, heat exchanger equipment, circulation pumps, and air agitation systems.

Composite mesh-pad system means an add-on air pollution control device typically consisting of several mesh-pad stages. The purpose of the first stage is to remove large particles. Smaller particles are removed in the second stage, which consists of the composite mesh pad. A final stage may remove any reentrained particles not collected by the composite mesh pad.

Decorative chromium electroplating means the process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part(s) serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 Amperes per square meter (A/m^2) for total plating times ranging between 0.5 to 5 minutes.

Electroplating or anodizing bath means the electrolytic solution used as the conducting medium in which the flow of current is accompanied by movement of metal ions for the purposes of electroplating metal out of the solution onto a workpiece or for oxidizing the base material.

Emission limitation means, for the purposes of this subpart, the concentration of total chromium allowed to be emitted expressed in milligrams per dry standard cubic meter (mg/dscm), or the allowable surface tension expressed in dynes per centimeter (dynes/cm).

Enclosed hard chromium electroplating tank means a chromium electroplating tank that is equipped with an enclosing hood and ventilated at half the rate or less that of an open surface tank of the same surface area.

Facility means the major or area source at which chromium electroplating or chromium anodizing is performed.

Fiber-bed mist eliminator means an add-on air pollution control device that removes contaminants from a gas stream through the mechanisms of inertial impaction and Brownian diffusion. These devices are typically installed downstream of another control device, which serves to prevent plugging, and consist of one or more fiber beds. Each bed consists of a hollow cylinder formed from two concentric screens; the fiber between the screens may be fabricated from glass, ceramic plastic, or metal.

Foam blanket means the type of chemical fume suppressant that generates a layer of foam across the surface of a solution when current is applied to that solution.

Fresh water means water, such as tap water, that has not been previously used in a process operation or, if the water has been recycled from a process operation, it has been treated and meets the effluent guidelines for chromium wastewater.

Hard chromium electroplating or industrial chromium electroplating means a process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance. In this process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Hard chromium electroplating process is performed at current densities typically ranging from 1,600 to 6,500 A/m^2 for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness.

Hexavalent chromium means the form of chromium in a valence state of +6.

Large, hard chromium electroplating facility means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity greater than or equal to 60 million ampere-hours per year (amp-hr/yr).

Maximum cumulative potential rectifier capacity means the summation of the total installed rectifier capacity associated with the hard chromium electroplating tanks at a facility, expressed in amperes, multiplied by the maximum potential operating schedule of 8,400 hours per year and 0.7, which assumes that electrodes are energized 70 percent of the total operating time. The maximum potential operating schedule is based on operating 24 hours per day, 7 days per week, 50 weeks per year.

Open surface hard chromium electroplating tank means a chromium electroplating tank that is ventilated at a rate consistent with good ventilation practices for open tanks.

Operating parameter value means a minimum or maximum value established for a control device or process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator is in continual compliance with the applicable emission limitation or standard.

Packed-bed scrubber means an add-on air pollution control device consisting of a single or double packed bed that contains packing media on which the chromic acid droplets impinge. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Research or laboratory operation means an operation whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not involved in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Small, hard chromium electroplating facility means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity less than 60 million amp-hr/yr.

Stalagmometer means an instrument used to measure the surface tension of a solution by determining the mass of a drop of liquid by weighing a known number of drops or by counting the number of drops obtained from a given volume of liquid.

Surface tension means the property, due to molecular forces, that exists in the surface film of all liquids and tends to prevent liquid from spreading.

Tank operation means the time in which current and/or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank.

Tensiometer means an instrument used to measure the surface tension of a solution by determining the amount of force needed to pull a ring from the liquid surface. The amount of force is proportional to the surface tension.

Trivalent chromium means the form of chromium in a valence state of +3.

Trivalent chromium process means the process used for electrodeposition of a thin layer of chromium onto a base material using a trivalent chromium solution instead of a chromic acid solution.

Wetting agent means the type of chemical fume suppressant that reduces the surface tension of a liquid.

(b) *Nomenclature.* The nomenclature used in this subpart has the following meaning:

(1) AMR=the allowable mass emission rate from each type of affected source subject to the same emission limitation in milligrams per hour (mg/hr).

(2) AMR_{sys}=the allowable mass emission rate from affected sources controlled by an add-on air pollution control device controlling emissions from multiple sources in mg/hr.

(3) EL=the applicable emission limitation from §63.342 in milligrams per dry standard cubic meter (mg/dscm).

(4) IA_{total}=the sum of all inlet duct areas from both affected and nonaffected sources in meters squared.

(5) IDA_i=the total inlet area for all ducts associated with affected sources in meters squared.

(6) $IDA_{i,a}$=the total inlet duct area for all ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation in meters squared.

(7) VR=the total of ventilation rates for each type of affected source subject to the same emission limitation in dry standard cubic meters per minute (dscm/min).

(8) VR_{inlet}=the total ventilation rate from all inlet ducts associated with affected sources in dscm/min.

(9) $VR_{inlet,a}$=the total ventilation rate from all inlet ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation in dscm/min.

(10) VR_{tot}=the average total ventilation rate for the three test runs as determined at the outlet by means of the Method 306 in appendix A of this part testing in dscm/min.

[60 FR 4963, Jan. 25, 1995, as amended at 69 FR 42894, July 19, 2004]

§ 63.342 Standards.

(a) Each owner or operator of an affected source subject to the provisions of this subpart shall comply with these requirements on and after the compliance dates specified in §63.343(a). All affected sources are regulated by applying maximum achievable control technology.

(b) *Applicability of emission limitations.* (1) The emission limitations in this section apply during tank operation as defined in §63.341, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance and that are required by paragraph (f) of this section must be followed during malfunctions.

(2) If an owner or operator is controlling a group of tanks with a common add-on air pollution control device, the emission limitations of paragraphs (c), (d), and (e) of this section apply whenever any one affected source is operated. The emission limitation that applies to the group of affected sources is:

(i) The emission limitation identified in paragraphs (c), (d), and (e) of this section if the affected sources are performing the same type of operation (e.g., hard chromium electroplating), are subject to the same emission limitation, and are not controlled by an add-on air pollution control device also controlling nonaffected sources;

(ii) The emission limitation calculated according to §63.344(e)(3) if affected sources are performing the same type of operation, are subject to the same emission limitation, and are controlled with an add-on air pollution control device that is also controlling nonaffected sources; and

(iii) The emission limitation calculated according to §63.344(e)(4) if affected sources are performing different types of operations, or affected sources are performing the same operations but subject to different emission limitations, and are controlled with an add-on air pollution control device that may also be controlling emissions from nonaffected sources.

(c)(1) *Standards for open surface hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(i) 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) of ventilation air (6.6×10^{-6}grains per dry standard cubic foot (gr/dscf)) for all open surface hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5}gr/dscf) if the open surface hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility; or

(iii) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 45 dynes per centimeter (dynes/cm) (3.1×10^{-3}pound-force per foot (lb_f/ft)) as measured by a stalagmometer or 35 dynes/cm ($2.4 \times 10^{-3}$$lb_f$/ft) as measured by a tensiometer at any time during tank operation.

(2) *Standards for enclosed hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(i) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6}gr/dscf) for all enclosed hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small, hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5}gr/dscf) if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility; or

(iii) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 45 dynes/cm ($3.1 \times 10^{-3}$$lb_f$/ft) as measured by a stalagmometer or 35 dynes/cm ($2.4 \times 10^{-3}$$lb_f$/ft) as measured by a tensiometer at any time during tank operation; or

(iv) Not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate determined by using the calculation procedure in §63.344(f)(1)(i) for all enclosed hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small, hard chromium electroplating facilities; or

(v) Not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate determined by using the calculation procedure in §63.344(f)(1)(ii) if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility.

(3)(i) An owner or operator may demonstrate the size of a hard chromium electroplating facility through the definitions in §63.341(a). Alternatively, an owner or operator of a facility with a maximum cumulative potential rectifier capacity of 60 million amp-hr/yr or more may be considered small if the actual cumulative rectifier capacity is less than 60 million amp-hr/yr as demonstrated using the following procedures:

(A) If records show that the facility's previous annual actual rectifier capacity was less than 60 million amp-hr/yr, by using nonresettable ampere-hr meters and keeping monthly records of actual ampere-hr usage for each 12-month rolling period following the compliance date in accordance with §63.346(b)(12). The actual cumulative rectifier

capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months; or

(B) By accepting a federally-enforceable limit on the maximum cumulative potential rectifier capacity of a hard chromium electroplating facility and by maintaining monthly records in accordance with §63.346(b)(12) to demonstrate that the limit has not been exceeded. The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months.

(ii) Once the monthly records required to be kept by §63.346(b)(12) and by this paragraph (c)(3)(ii) show that the actual cumulative rectifier capacity over the previous 12-month rolling period corresponds to the large designation, the owner or operator is subject to the emission limitation identified in paragraph (c)(1)(i), (iii), (c)(2)(i), (iii), or (iv) of this section, in accordance with the compliance schedule of §63.343(a)(5).

(d) *Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.01 mg/dscm (4.4×10^{-6}gr/dscf); or

(2) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected source to exceed 45 dynes/cm (3.1×10^{-3}lb$_f$/ft) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3}lb$_f$/ft) as measured by a tensiometer at any time during operation of the tank.

(e) *Standards for decorative chromium electroplating tanks using a trivalent chromium bath.* (1) Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient is subject to the recordkeeping and reporting requirements of §§63.346(b)(14) and 63.347(i), but are not subject to the work practice requirements of paragraph (f) of this section, or the continuous compliance monitoring requirements in §63.343(c). The wetting agent must be an ingredient in the trivalent chromium bath components purchased from vendors.

(2) Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that uses a trivalent chromium bath that does not incorporate a wetting agent as a bath ingredient is subject to the standards of paragraph (d) of this section.

(3) Each owner or operator of existing, new, or reconstructed decorative chromium electroplating tank that had been using a trivalent chromium bath that incorporates a wetting agent and ceases using this type of bath must fulfill the reporting requirements of §63.347(i)(3) and comply with the applicable emission limitation within the timeframe specified in §63.343(a)(7).

(f) *Operation and maintenance practices.* All owners or operators subject to the standards in paragraphs (c) and (d) of this section are subject to these operation and maintenance practices.

(1)(i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

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

(ii) Based on the results of a determination made under paragraph (f)(2)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph (f)(3) of this section for that source. Revisions may be required if the Administrator finds that the plan:

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

(B) Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or

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

(3) *Operation and maintenance plan.* (i) The owner or operator of an affected source subject to paragraph (f) of this section shall prepare an operation and maintenance plan no later than the compliance date, except for hard chromium electroplaters and the chromium anodizing operations in California which have until January 25, 1998. The plan shall be incorporated by reference into the source's title V permit, if and when a title V permit is required. The plan shall include the following elements:

(A) The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;

(B) For sources using an add-on control device or monitoring equipment to comply with this subpart, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in Table 1 of this section, if the specific equipment used is identified in Table 1 of this section;

(C) If the specific equipment used is not identified in Table 1 of this section, the plan shall incorporate proposed operation and maintenance practices. These proposed operation and maintenance practices shall be submitted for approval as part of the submittal required under §63.343(d);

(D) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

(E) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.

(ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(iii) Recordkeeping associated with the operation and maintenance plan is identified in §63.346(b). Reporting associated with the operation and maintenance plan is identified in §63.347 (g) and (h) and paragraph (f)(3)(iv) of this section.

(iv) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph (f)(3)(i) of this section, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.

(v) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

(vi) To satisfy the requirements of paragraph (f)(3) of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

(g) The standards in this section that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent.

Table 1 to §63.342—Summary of Operation and Maintenance Practices

Control technique	Operation and maintenance practices	Frequency
Composite mesh-pad (CMP) system	1. Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1. 1/quarter.
	2. Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	2. 1/quarter.
	3. Visually inspect ductwork from tank to the control device to ensure there are no leaks	3. 1/quarter.
	4. Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	4. Per manufacturer.
Packed-bed scrubber (PSB)	1. Visually inspect device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device	1. 1/quarter.
	2. Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist	2. 1/quarter.
	3. Same as number 3 above	3. 1/quarter.
	4. Add fresh makeup water to the top of the packed bed[a,b]	4. Whenever makeup is added.
PBS/CMP system	1. Same as for CMP system	1. 1/quarter.
	2. Same as for CMP system	2. 1/quarter.
	3. Same as for CMP system	3. 1/quarter.
	4. Same as for CMP system	4. Per manufacturer.

Fiber-bed mist eliminator[c]	1. Visually inspect fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices	1. 1/quarter.
	2. Visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks	2. 1/quarter.
	3. Perform washdown of fiber elements in accordance with manufacturers recommendations	3. Per manufacturer.
Air pollution control device (APCD) not listed in rule	To be proposed by the source for approval by the Administrator	To be proposed by the source for approval by the Administrator.
Monitoring Equipment		
Pitot tube	Backflush with water, or remove from the duct and rinse with fresh water. Replace in the duct and rotate 180 degrees to ensure that the same zero reading is obtained. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued	1/quarter.
Stalagmometer	Follow manufacturers recommendations	

[a]If greater than 50 percent of the scrubber water is drained (e.g., for maintenance purposes), makeup water may be added to the scrubber basin.

[b]For horizontal-flow scrubbers, top is defined as the section of the unit directly above the packing media such that the makeup water would flow perpendicular to the air flow through the packing. For vertical-flow units, the top is defined as the area downstream of the packing material such that the makeup water would flow countercurrent to the air flow through the unit.

[c]Work practice standards for the control device installed upstream of the fiber-bed mist eliminator to prevent plugging do not apply as long as the work practice standards for the fiber-bed unit are followed.

[60 FR 4963, Jan. 25, 1995; 60 FR 33122, June 27, 1995, as amended at 61 FR 27787, June 3, 1996; 62 FR 42920, Aug. 11, 1997; 68 FR 37347, June 23, 2003; 69 FR 42894, July 19, 2004; 71 FR 20456, Apr. 20, 2006]

§ 63.343 Compliance provisions.

(a) *Compliance dates.* (1) The owner or operator of an existing affected source shall comply with the emission limitations in §63.342 as follows:

(i) No later than 1 year after January 25, 1995, if the affected source is a decorative chromium electroplating tank; and

(ii) No later than 2 years after January 25, 1995, if the affected source is a hard chromium electroplating tank or a chromium anodizing tank.

(2) The owner or operator of a new or reconstructed affected source that has an initial startup after January 25, 1995, shall comply immediately upon startup of the source. The owner or operator of a new or reconstructed affected

source that has an initial startup after December 16, 1993 but before January 25, 1995, shall follow the compliance schedule of §63.6(b)(1).

(3) The owner or operator of an existing area source that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source must comply with the provisions for existing major sources, including the reporting provisions of §63.347(g), immediately upon becoming a major source.

(4) The owner or operator of a new area source (i.e., an area source for which construction or reconstruction was commenced after December 16, 1993) that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source must comply with the provisions for new major sources, immediately upon becoming a major source.

(5) An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of §63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by §§63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in paragraph (a)(1)(ii) of this section, whichever is later.

(6) *Request for an extension of compliance.* An owner or operator of an affected source or sources that requests an extension of compliance shall do so in accordance with this paragraph and the applicable paragraphs of §63.6(i). When the owner or operator is requesting the extension for more than one affected source located at the facility, then only one request may be submitted for all affected sources at the facility.

(i) The owner or operator of an existing affected source who is unable to comply with a relevant standard under this subpart may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the owner or operator up to 1 additional year to comply with the standard for the affected source. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and is otherwise required to obtain a title V permit for the source shall apply for such permit or apply to have the title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the owner or operator's title V permit for the affected source(s) according to the provisions of 40 CFR part 70 or 40 CFR part 71, whichever is applicable.

(ii) Any request under this paragraph for an extension of compliance with a relevant standard shall be submitted in writing to the appropriate authority not later than 6 months before the affected source's compliance date as specified in this section.

(7) An owner or operator of a decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent, and that ceases using the trivalent chromium process, must comply with the emission limitation now applicable to the tank within 1 year of switching bath operation.

(b) *Methods to demonstrate initial compliance.* (1) Except as provided in paragraphs (b)(2) and (b)(3) of this section, an owner or operator of an affected source subject to the requirements of this subpart is required to conduct an initial performance test as required under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, using the procedures and test methods listed in §§63.7 and 63.344.

(2) If the owner or operator of an affected source meets all of the following criteria, an initial performance test is not required to be conducted under this subpart:

(i) The affected source is a hard chromium electroplating tank, a decorative chromium electroplating tank or a chromium anodizing tank; and

(ii) A wetting agent is used in the plating or anodizing bath to inhibit chromium emissions from the affected source; and

(iii) The owner or operator complies with the applicable surface tension limit of §63.342(c)(1)(iii), (c)(2)(iii), or (d)(2) as demonstrated through the continuous compliance monitoring required by paragraph (c)(5)(ii) of this section.

(3) If the affected source is a decorative chromium electroplating tank using a trivalent chromium bath, and the owner or operator is subject to the provisions of §63.342(e), an initial performance test is not required to be conducted under this subpart.

(c) *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of this subpart shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

(1) *Composite mesh-pad systems.* (i) During the initial performance test, the owner or operator of an affected source, or a group of affected sources under common control, complying with the emission limitations in §63.342 through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in §63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in §63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ±2 inches of water column from this value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California, which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ±2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

(iii) The owner or operator of an affected source complying with the emission limitations in §63.343 through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs (c)(1)(i) or (ii) of this section. To establish a new site-specific operating parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs (c)(1)(iii)(A) through (D) of this section.

(A) Determine the outlet chromium concentration using the test methods and procedures in §63.344(c);

(B) Establish the site-specific operating parameter value using the procedures §63.344(d)(5);

(C) Satisfy the recordkeeping requirements in §63.346(b)(6) through (8); and

(D) Satisfy the reporting requirements in §63.347(d) and (f).

(iv) The requirement to operate a composite mesh-pad system within the range of pressure drop values established under paragraphs (c)(1)(i) through (iii) of this section does not apply during automatic washdown cycles of the composite mesh-pad system.

(2) *Packed-bed scrubber systems.* (i) During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in §63.342 through the use of a packed-bed scrubber system shall determine the outlet chromium concentration using the procedures in §63.344(c), and shall establish as site-specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in §63.344(d) (4) and (5). An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the owner or operator may set as the compliant value the average pressure drop and inlet velocity pressure measured over the three test runs of one performance test, and accept ±1 inch of water column from the pressure drop value and ±10 percent from the velocity pressure value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the velocity pressure at the inlet to the packed-bed system and the pressure drop across the scrubber system once each day that any affected source is operating. To be in compliance with the standards, the scrubber system shall be operated within ±10 percent of the velocity pressure value established during the initial performance test, and within ±1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests.

(3) *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source, or group of affected sources under common control, that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of §63.342 shall comply with the monitoring requirements for composite mesh-pad systems as identified in paragraph (c)(1) of this section.

(4) *Fiber-bed mist eliminator.* (i) During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in §63.342 through the use of a fiber-bed mist eliminator shall determine the outlet chromium concentration using the procedures in §63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the fiber-bed mist eliminator and the pressure drop across the control device installed upstream of the fiber bed to prevent plugging, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in §63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ±1 inch of water column from this value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the fiber-bed mist eliminator, and the control device installed upstream of the fiber bed to prevent plugging, once each day that any affected source is operating. To be in compliance with the standards, the fiber-bed mist eliminator and the upstream control device shall be operated within ±1 inch of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

(5) *Wetting agent-type or combination wetting agent-type/foam blanket fume suppressants.* (i) During the initial performance test, the owner or operator of an affected source complying with the emission limitations in §63.342 through the use of a wetting agent in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in §63.344(c). The owner or operator shall establish as the site-specific operating parameter the surface tension of the bath using Method 306B, appendix A of this part, setting the maximum value that corresponds to compliance with the applicable emission limitation. In lieu of establishing the maximum surface tension during the performance test, the owner or operator may accept 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer as the maximum surface tension value that corresponds to compliance with the applicable emission limitation. However, the owner or operator is exempt from conducting a performance test only if the criteria of paragraph (b)(2) of this section are met.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California, which have until January 25, 1998, the owner or operator of an affected source shall monitor the surface tension of the electroplating or anodizing bath. Operation of the affected source at a surface tension greater than the value established during the performance test, or greater than 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer if the owner or operator is using this value in accordance with paragraph (c)(5)(i) of this section, shall constitute noncompliance with the standards. The surface tension shall be monitored according to the following schedule:

(A) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of this part.

(B) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface

tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.

(C) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (c)(5)(ii)(B) of this section. For example, if an owner or operator had been monitoring an affected source once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.

(iii) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraphs (c)(5)(ii) (B) and (C) of this section.

(6) *Foam blanket-type fume suppressants.* (i) During the initial performance test, the owner or operator of an affected source complying with the emission limitations in §63.342 through the use of a foam blanket in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in §63.344(c), and shall establish as the site-specific operating parameter the thickness of the foam blanket, setting the minimum thickness that corresponds to compliance with the applicable emission limitation. In lieu of establishing the minimum foam blanket thickness during the performance test, the owner or operator may accept 2.54 centimeters (1 inch) as the minimum foam blanket thickness that corresponds to compliance with the applicable emission limitation. All foam blanket measurements must be taken in close proximity to the workpiece or cathode area in the plating tank(s).

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, the owner or operator of an affected source shall monitor the foam blanket thickness of the electroplating or anodizing bath. Operation of the affected source at a foam blanket thickness less than the value established during the performance test, or less than 2.54 cm (1 inch) if the owner or operator is using this value in accordance with paragraph (c)(6)(i) of this section, shall constitute noncompliance with the standards. The foam blanket thickness shall be measured according to the following schedule:

(A) The foam blanket thickness shall be measured once every 1 hour of tank operation.

(B) The time between monitoring can be increased if there have been no exceedances. The foam blanket thickness shall be measured once every hour of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances for 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 4 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 8 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once per 8 hours of tank operation.

(C) Once an exceedance occurs as indicated through foam blanket thickness monitoring, the original monitoring schedule of once every hour must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (c)(6)(ii)(B) of this section. For example, if an owner or operator had been monitoring an affected source once every 8 hours and an exceedance occurs, subsequent monitoring would take place once every hour of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 8 hours of tank operation.

(iii) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every hour must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraphs (c)(6)(ii) (B) and (C) of this section.

(7) *Fume suppressant/add-on control device.* (i) If the owner or operator of an affected source uses both a fume suppressant and add-on control device and both are needed to comply with the applicable emission limit, monitoring requirements as identified in paragraphs (c) (1) through (6) of this section, and the work practice standards of Table 1 of §63.342, apply for each of the control techniques used.

(ii) If the owner or operator of an affected source uses both a fume suppressant and add-on control device, but only one of these techniques is needed to comply with the applicable emission limit, monitoring requirements as identified in paragraphs (c) (1) through (6) of this section, and work practice standards of Table 1 of §63.342, apply only for the control technique used to achieve compliance.

(8) *Use of an alternative monitoring method.* (i) Requests and approvals of alternative monitoring methods shall be considered in accordance with §63.8(f)(1), (f)(3), (f)(4), and (f)(5).

(ii) After receipt and consideration of an application for an alternative monitoring method, the Administrator may approve alternatives to any monitoring methods or procedures of this subpart including, but not limited to, the following:

(A) Alternative monitoring requirements when installation or use of monitoring devices specified in this subpart would not provide accurate measurements due to interferences caused by substances within the effluent gases; or

(B) Alternative locations for installing monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(d) An owner or operator who uses an air pollution control device not listed in this section shall submit a description of the device, test results collected in accordance with §63.344(c) verifying the performance of the device for reducing chromium emissions to the atmosphere to the level required by this subpart, a copy of the operation and maintenance plan referenced in §63.342(f) including operation and maintenance practices, and appropriate operating parameters that will be monitored to establish continuous compliance with the standards. The monitoring plan submitted identifying the continuous compliance monitoring is subject to the Administrator's approval.

[60 FR 4963, Jan. 25, 1995; 60 FR 33122, June 27, 1995, as amended at 62 FR 42920, Aug. 11, 1997; 68 FR 37347, June 23, 2003; 69 FR 42895, July 19, 2004]

§ 63.344 Performance test requirements and test methods.

(a) *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures in this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(9) of this section. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.

(1) A brief process description;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations; and

(9) Any other information required by the test method.

(b)(1) If the owner or operator of an affected source conducts performance testing at startup to obtain an operating permit in the State in which the affected source is located, the results of such testing may be used to demonstrate compliance with this subpart if:

(i) The test methods and procedures identified in paragraph (c) of this section were used during the performance test;

(ii) The performance test was conducted under representative operating conditions for the source;

(iii) The performance test report contains the elements required by paragraph (a) of this section; and

(iv) The owner or operator of the affected source for which the performance test was conducted has sufficient data to establish the operating parameter value(s) that correspond to compliance with the standards, as required for continuous compliance monitoring under §63.343(c).

(2) The results of tests conducted prior to December 1991 in which Method 306A, appendix A of this part, was used to demonstrate the performance of a control technique are not acceptable.

(c) *Test methods.* Each owner or operator subject to the provisions of this subpart and required by §63.343(b) to conduct an initial performance test shall use the test methods identified in this section to demonstrate compliance with the standards in §63.342.

(1) Method 306 or Method 306A, “Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations,” appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths can demonstrate compliance with the emission limits of §63.342 by measuring either total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

(2) The California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, 1102 Q Street, Sacramento, California 95814) may be used to determine the chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:

(i) If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33 to 66 micrograms of catch in the sampling train.

(ii) If Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-column Reactor (ICPCR) analyses were used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).

(iii) In the case of either paragraph (c)(2) (i) or (ii) of this section, a minimum of 3 separate runs must be conducted. The other requirements of §63.7 that apply to affected sources, as indicated in Table 1 of this subpart, must also be met.

(3) Method 306B, “Surface Tension Measurement and Recordkeeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities,” appendix A of this part shall be used to measure the surface tension of electroplating and anodizing baths.

(4) Alternate test methods may also be used if the method has been validated using Method 301, appendix A of this part and if approved by the Administrator. Procedures for requesting and obtaining approval are contained in §63.7(f).

(d) *Establishing site-specific operating parameter values.* (1) Each owner or operator required to establish site-specific operating parameters shall follow the procedures in this section.

(2) All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(i) Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with section 2.2 of Method 2 (40 CFR part 60, appendix A).

(ii) Specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with manufacturer's accuracy specifications.

(3) The surface tension of electroplating and anodizing baths shall be measured using Method 306B, “Surface Tension Measurement and Recordkeeping for Tanks used at Decorative Chromium Electroplating and Anodizing Facilities,” appendix A of this part. This method should also be followed when wetting agent type or combination wetting agent/foam blanket type fume suppressants are used to control chromium emissions from a hard chromium electroplating tank and surface tension measurement is conducted to demonstrate continuous compliance.

(4) The owner or operator of a source required to measure the velocity pressure at the inlet to an add-on air pollution control device in accordance with §63.343(c)(2), shall establish the site-specific velocity pressure as follows:

(i) Locate a velocity traverse port in a section of straight duct that connects the hooding on the plating tank or tanks with the control device. The port shall be located as close to the control system as possible, and shall be placed a minimum of 2 duct diameters downstream and 0.5 diameter upstream of any flow disturbance such as a bend, expansion, or contraction (see Method 1, 40 CFR part 60, appendix A). If 2.5 diameters of straight duct work does not exist, locate the port 0.8 of the duct diameter downstream and 0.2 of the duct diameter upstream from any flow disturbance.

(ii) A 12-point velocity traverse of the duct to the control device shall be conducted along a single axis according to Method 2 (40 CFR part 60, appendix A) using an S-type pitot tube; measurement of the barometric pressure and duct temperature at each traverse point is not required, but is suggested. Mark the S-type pitot tube as specified in Method 1 (40 CFR part 60, appendix A) with 12 points. Measure the velocity pressure (Δ p) values for the velocity points and record. Determine the square root of the individual velocity point Δ p values and average. The point with the square root value that comes closest to the average square root value is the point of average velocity. The Δ p value measured for this point during the performance test will be used as the reference for future monitoring.

(5) The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with §63.343(c) (1) through (4) may establish the pressure drop in accordance with the following guidelines:

(i) Pressure taps shall be installed at any of the following locations:

(A) At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;

(B) On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or

(C) On the front side of the first mesh pad and back side of the last mesh pad within the control system.

(ii) Pressure taps shall be sited at locations that are:

(A) Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.

(B) Situated such that no air infiltration at measurement site will occur that could bias the measurement.

(iii) Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.

(iv) Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.

(v) Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.

(vi) Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

(e) *Special compliance provisions for multiple sources controlled by a common add-on air pollution control device.* (1) This section identifies procedures for measuring the outlet chromium concentration from an add-on air pollution control device that is used to control multiple sources that may or may not include sources not affected by this subpart.

(2) When multiple affected sources performing the same type of operation (e.g., all are performing hard chromium electroplating), and subject to the same emission limitation, are controlled with an add-on air pollution control device that is not controlling emissions from any other type of affected operation or from any nonaffected sources, the applicable emission limitation identified in §63.342 must be met at the outlet of the add-on air pollution control device.

(3) When multiple affected sources performing the same type of operation and subject to the same emission limitation are controlled with a common add-on air pollution control device that is also controlling emissions from sources not affected by these standards, the following procedures should be followed to determine compliance with the applicable emission limitation in §63.342:

(i) Calculate the cross-sectional area of each inlet duct (i.e., uptakes from each hood) including those not affected by the standard.

(ii) Determine the total sample time per test run by dividing the total inlet area from all tanks connected to the control system by the total inlet area for all ducts associated with affected sources, and then multiply this number by 2 hours. The calculated time is the minimum sample time required per test run.

(iii) Perform Method 306 testing and calculate an outlet mass emission rate.

(iv) Determine the total ventilation rate from the affected sources by using equation 1:

$$VR_{tot} \times \frac{IDA_i}{\sum IA_{total}} = VR_{inlet} \qquad (1)$$

where VR_{tot} is the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing; IDA_i is the total inlet area for all ducts associated with affected sources; IA_{total} is the sum of all inlet duct areas from both affected and nonaffected sources; and VR_{inlet} is the total ventilation rate from all inlet ducts associated with affected sources.

(v) Establish the allowable mass emission rate of the system (AMR_{sys}) in milligrams of total chromium per hour (mg/hr) using equation 2:

$$\sum VR_{inlet} \times EL \times 60\,\text{minutes/hours} = AMR_{sys} \qquad (2)$$

where $\Sigma\, VR_{inlet}$ is the total ventilation rate in dscm/min from the affected sources, and EL is the applicable emission limitation from §63.342 in mg/dscm. The allowable mass emission rate (AMR_{sys}) calculated from equation 2 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 testing in order for the source to be in compliance with the standard.

(4) When multiple affected sources performing different types of operations (e.g., hard chromium electroplating, decorative chromium electroplating, or chromium anodizing) are controlled by a common add-on air pollution control device that may or may not also be controlling emissions from sources not affected by these standards, or if the affected sources controlled by the common add-on air pollution control device perform the same operation but are subject to different emission limitations (e.g., because one is a new hard chromium plating tank and one is an existing small, hard chromium plating tank), the following procedures should be followed to determine compliance with the applicable emission limitation in §63.342:

(i) Follow the steps outlined in paragraphs (e)(3)(i) through (e)(3)(iii) of this section.

(ii) Determine the total ventilation rate for each type of affected source using equation 3:

$$VR_{tot} \times \frac{IDA_{i,a}}{\sum IA_{total}} = VR_{inlet,a} \qquad (3)$$

where VR_{tot} is the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing; $IDA_{i,a}$ is the total inlet duct area for all ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation; IA_{total} is the sum of all duct areas from both affected and nonaffected sources; and $VR_{inlet,a}$ is the total ventilation rate from all inlet ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation.

(iii) Establish the allowable mass emission rate in mg/hr for each type of affected source that is controlled by the add-on air pollution control device using equation 4, 5, 6, or 7 as appropriate:

$VR_{hc1} \times EL_{hc1} \times 60$ minutes/hour = AMR_{hc1} (4)

$VR_{hc2} \times EL_{hc2} \times 60$ minutes/hour = AMR_{hc2} (5)

$VR_{dc} \times EL_{dc} \times 60$ minutes/hour = AMR_{dc} (6)

$VR_{ca} \times EL_{ca} \times 60$ minutes/hour = AMR_{ca} (7)

where “hc” applies to the total of ventilation rates for all hard chromium electroplating tanks subject to the same emission limitation, “dc” applies to the total of ventilation rates for the decorative chromium electroplating tanks, “ca” applies to the total of ventilation rates for the chromium anodizing tanks, and EL is the applicable emission limitation from §63.342 in mg/dscm. There are two equations for hard chromium electroplating tanks because different emission limitations may apply (e.g., a new tank versus an existing, small tank).

(iv) Establish the allowable mass emission rate (AMR) in mg/hr for the system using equation 8, including each type of affected source as appropriate:

$AMR_{hc1} + AMR_{hc2} + AMR_{dc} + AMR_{ca} = AMR_{sys}$ (8)

The allowable mass emission rate calculated from equation 8 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 testing in order for the source to be in compliance with the standards.

(5) Each owner or operator that uses the special compliance provisions of this paragraph to demonstrate compliance with the emission limitations of §63.342 shall submit the measurements and calculations to support these compliance methods with the notification of compliance status required by §63.347(e).

(6) Each owner or operator that uses the special compliance provisions of this section to demonstrate compliance with the emission limitations of §63.342 shall repeat these procedures if a tank is added or removed from the control system regardless of whether that tank is a nonaffected source. If the new nonaffected tank replaces an existing nonaffected tank of the same size and is connected to the control system through the same size inlet duct then this procedure does not have to be repeated.

(f) *Compliance provisions for the mass rate emission standard for enclosed hard chromium electroplating tanks.* (1) This section identifies procedures for calculating the maximum allowable mass emission rate for owners or operators of affected sources who choose to meet the mass emission rate standard in §63.342(c)(2)(iv) or (v).

(i)(A) The owner or operator of an enclosed hard chromium electroplating tank that is an affected source other than an existing affected source located at a small hard chromium electroplating facility who chooses to meet the mass emission rate standard in §63.342(c)(2)(iv) shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 9:

MAMER = ETSA × K × 0.015 mg/dscm (9)

Where:

MAMER = the alternative emission rate for enclosed hard chromium electroplating tanks in mg/hr.

ETSA = the hard chromium electroplating tank surface area in square feet(ft^2).

K = a conversion factor, 425 dscm/(ft^2 × hr).

(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from Method 306 testing is less than or equal to the maximum allowable mass emission rate calculated from equation 9.

(ii)(A) The owner or operator of an enclosed hard chromium electroplating tank that is an existing affected source located at a small hard chromium electroplating facility who chooses to meet the mass emission rate standard in §63.342(c)(2)(v) shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 10:

MAMER = ETSA × K × 0.03 mg/dscm. (10)

(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from testing using Method 306 of appendix A to part 63 is less than or equal to the maximum allowable mass emission rate calculated from equation 10.

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 69 FR 42896, July 19, 2004]

§ 63.345 Provisions for new and reconstructed sources.

(a) This section identifies the preconstruction review requirements for new and reconstructed affected sources that are subject to, or become subject to, this subpart.

(b) *New or reconstructed affected sources.* The owner or operator of a new or reconstructed affected source is subject to §63.5(a), (b)(1), (b)(5), (b)(6), and (f)(1), as well as the provisions of this paragraph.

(1) After January 25, 1995, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, no person may construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart,

without submitting a notification of construction or reconstruction to the Administrator. The notification shall contain the information identified in paragraphs (b) (2) and (3) of this section, as appropriate.

(2) The notification of construction or reconstruction required under paragraph (b)(1) of this section shall include:

(i) The owner or operator's name, title, and address;

(ii) The address (i.e., physical location) or proposed address of the affected source if different from the owner's or operator's;

(iii) A notification of intention to construct a new affected source or make any physical or operational changes to an affected source that may meet or has been determined to meet the criteria for a reconstruction as defined in §63.2;

(iv) An identification of subpart N of this part as the basis for the notification;

(v) The expected commencement and completion dates of the construction or reconstruction;

(vi) The anticipated date of (initial) startup of the affected source;

(vii) The type of process operation to be performed (hard or decorative chromium electroplating, or chromium anodizing);

(viii) A description of the air pollution control technique to be used to control emissions from the affected source, such as preliminary design drawings and design capacity if an add-on air pollution control device is used; and

(ix) An estimate of emissions from the source based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emission limits of this subpart. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.

(3) If a reconstruction is to occur, the notification required under paragraph (b)(1) of this section shall include the following in addition to the information required in paragraph (b)(2) of this section:

(i) A brief description of the affected source and the components to be replaced;

(ii) A brief description of the present and proposed emission control technique, including the information required by paragraphs (b)(2) (viii) and (ix) of this section;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the notification of reconstruction, the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or requirements, the owner or operator need not submit the information required in paragraphs (b)(3) (iii) through (v) of this section.

(4) The owner or operator of a new or reconstructed affected source that submits a notification in accordance with paragraphs (b) (1) through (3) of this section is not subject to approval by the Administrator. Construction or reconstruction is subject only to notification and can begin upon submission of a complete notification.

(5) *Submittal timeframes.* After January 25, 1995, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, an owner or operator of a new or reconstructed affected source shall submit the notification of construction or reconstruction required by paragraph (b)(1) of this section according to the following schedule:

(i) If construction or reconstruction commences after January 25, 1995, the notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence.

(ii) If the construction or reconstruction had commenced and initial startup had not occurred before January 25, 1995, the notification shall be submitted as soon as practicable before startup but no later than 60 days after January 25, 1995.

§ 63.346 Recordkeeping requirements.

(a) The owner or operator of each affected source subject to these standards shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A of this part as identified in Table 1 of this subpart.

(b) The owner or operator of an affected source subject to the provisions of this subpart shall maintain the following records for such source:

(1) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of §63.342(f) and Table 1 of §63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

(2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;

(3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;

(4) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;

(5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by §63.342(f)(3);

(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 with the special compliance procedures of §63.344(e);

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

(9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;

(10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;

(11) The total process operating time of the affected source during the reporting period;

(12) Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the owner or operator is using the actual cumulative rectifier capacity to determine facility size in accordance with §63.342(c)(2);

(13) For sources using fume suppressants to comply with the standards, records of the date and time that fume suppressants are added to the electroplating or anodizing bath;

(14) For sources complying with §63.342(e), records of the bath components purchased, with the wetting agent clearly identified as a bath constituent contained in one of the components;

(15) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements, if the source has been granted a waiver under §63.10(f); and

(16) All documentation supporting the notifications and reports required by §63.9, §63.10, and §63.347.

(c) All records shall be maintained for a period of 5 years in accordance with §63.10(b)(1).

§ 63.347 Reporting requirements.

(a) The owner or operator of each affected source subject to these standards shall fulfill all reporting requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of this subpart. These reports shall be made to the Administrator at the appropriate address as identified in §63.13 or to the delegated State authority.

(1) Reports required by subpart A of this part and this section may be sent by U.S. mail, fax, or by another courier.

(i) Submittals sent by U.S. mail shall be postmarked on or before the specified date.

(ii) Submittals sent by other methods shall be received by the Administrator on or before the specified date.

(2) If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media.

(b) The reporting requirements of this section apply to the owner or operator of an affected source when such source becomes subject to the provisions of this subpart.

(c) *Initial notifications.* (1) The owner or operator of an affected source that has an initial startup before January 25, 1995, shall notify the Administrator in writing that the source is subject to this subpart. The notification shall be submitted no later than 180 calendar days after January 25, 1995, and shall contain the following information:

(i) The name, title, and address of the owner or operator;

(ii) The address (i.e., physical location) of each affected source;

(iii) A statement that subpart N of this part is the basis for this notification;

(iv) Identification of the applicable emission limitation and compliance date for each affected source;

(v) A brief description of each affected source, including the type of process operation performed;

(vi) For sources performing hard chromium electroplating, the maximum potential cumulative potential rectifier capacity;

(vii) For sources performing hard chromium electroplating, a statement of whether the affected source(s) is located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum potential cumulative rectifier capacity;

(viii) For sources performing hard chromium electroplating, a statement of whether the owner or operator of an affected source(s) will limit the maximum potential cumulative rectifier capacity in accordance with §63.342(c)(2) such that the hard chromium electroplating facility is considered small; and

(ix) A statement of whether the affected source is located at a major source or an area source as defined in §63.2.

(2) The owner or operator of a new or reconstructed affected source that has an initial startup after January 25, 1995 shall submit an initial notification (in addition to the notification of construction or reconstruction required by §63.345(b) as follows:

(i) A notification of the date when construction or reconstruction was commenced, shall be submitted simultaneously with the notification of construction or reconstruction, if construction or reconstruction was commenced before January 25, 1995;

(ii) A notification of the date when construction or reconstruction was commenced, shall be submitted no later than 30 calendar days after such date, if construction or reconstruction was commenced after January 25, 1995; and

(iii) A notification of the actual date of startup of the source shall be submitted within 30 calendar days after such date.

(d) *Notification of performance test.* (1) The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the test is scheduled to begin to allow the Administrator to have an observer present during the test. Observation of the performance test by the Administrator is optional.

(2) In the event the owner or operator is unable to conduct the performance test as scheduled, the provisions of §63.7(b)(2) apply.

(e) *Notification of compliance status.* (1) A notification of compliance status is required each time that an affected source becomes subject to the requirements of this subpart.

(2) If the State in which the source is located has not been delegated the authority to implement the rule, each time a notification of compliance status is required under this part, the owner or operator of an affected source shall submit to the Administrator a notification of compliance status, signed by the responsible official (as defined in §63.2) who shall certify its accuracy, attesting to whether the affected source has complied with this subpart. If the State has been delegated the authority, the notification of compliance status shall be submitted to the appropriate authority. The notification shall list for each affected source:

(i) The applicable emission limitation and the methods that were used to determine compliance with this limitation;

(ii) If a performance test is required by this subpart, the test report documenting the results of the performance test, which contains the elements required by §63.344(a), including measurements and calculations to support the special compliance provisions of §63.344(e) if these are being followed;

(iii) The type and quantity of hazardous air pollutants emitted by the source reported in mg/dscm or mg/hr if the source is using the special provisions of §63.344(e) to comply with the standards. (If the owner or operator is subject to the construction and reconstruction provisions of §63.345 and had previously submitted emission estimates, the owner or operator shall state that this report corrects or verifies the previous estimate.) For sources not required to conduct a performance test in accordance with §63.343(b), the surface tension measurement may fulfill this requirement;

(iv) For each monitored parameter for which a compliant value is to be established under §63.343(c), the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;

(v) The methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements, if methods differ from those identified in this subpart;

(vi) A description of the air pollution control technique for each emission point;

(vii) A statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the work practice standards in §63.342(f);

(viii) If the owner or operator is determining facility size based on actual cumulative rectifier capacity in accordance with §63.342(c)(2), records to support that the facility is small. For existing sources, records from any 12-month period preceding the compliance date shall be used or a description of how operations will change to meet a small designation shall be provided. For new sources, records of projected rectifier capacity for the first 12-month period of tank operation shall be used;

(ix) A statement by the owner or operator of the affected source as to whether the source has complied with the provisions of this subpart.

(3) For sources required to conduct a performance test by §63.343(b), the notification of compliance status shall be submitted to the Administrator no later than 90 calendar days following completion of the compliance demonstration required by §63.7 and §63.343(b).

(4) For sources that are not required to complete a performance test in accordance with §63.343(b), the notification of compliance status shall be submitted to the Administrator no later than 30 days after the compliance date specified in §63.343(a), except the date on which sources in California shall monitor the surface tension of the anodizing bath is extended to January 25, 1998.

(f) *Reports of performance test results.* (1) If the State in which the source is located has not been delegated the authority to implement the rule, the owner or operator of an affected source shall report to the Administrator the results of any performance test conducted as required by §63.7 or §63.343(b). If the State has been delegated the authority, the owner or operator of an affected source should report performance test results to the appropriate authority.

(2) Reports of performance test results shall be submitted no later than 90 days following the completion of the performance test, and shall be submitted as part of the notification of compliance status required by paragraph (e) of this section.

(g) *Ongoing compliance status reports for major sources.* (1) The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in paragraph (g)(3) of this section, and shall be submitted semiannually except when:

(i) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(ii) The monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c) show that the emission limit has been exceeded, in which case quarterly reports shall be submitted. Once an owner or operator of an affected source reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency under paragraph (g)(2) of this section is approved.

(2) *Request to reduce frequency of ongoing compliance status reports.* (i) An owner or operator who is required to submit ongoing compliance status reports on a quarterly (or more frequent basis) may reduce the frequency of reporting to semiannual if all of the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;

(B) The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A of this part and this subpart; and

(C) The Administrator does not object to a reduced reporting frequency for the affected source, as provided in paragraphs (g)(2) (ii) and (iii) of this section.

(ii) The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change, and the Administrator does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Administrator may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce reporting frequency, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iii) As soon as the monitoring data required by §63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to quarterly, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Administrator to reduce the reporting frequency as allowed by paragraph (g)(2) of this section.

(3) *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with §63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the following information:

(i) The company name and address of the affected source;

(ii) An identification of the operating parameter that is monitored for compliance determination, as required by §63.343(c);

(iii) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by paragraph (e) of this section;

(iv) The beginning and ending dates of the reporting period;

(v) A description of the type of process performed in the affected source;

(vi) The total operating time of the affected source during the reporting period;

(vii) If the affected source is a hard chromium electroplating tank and the owner or operator is limiting the maximum cumulative rectifier capacity in accordance with §63.342(c)(2), the actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis;

(viii) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;

(ix) A certification by a responsible official, as defined in §63.2, that the work practice standards in §63.342(f) were followed in accordance with the operation and maintenance plan for the source;

(x) If the operation and maintenance plan required by §63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by §63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;

(xi) A description of any changes in monitoring, processes, or controls since the last reporting period;

(xii) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(xiii) The date of the report.

(4) When more than one monitoring device is used to comply with the continuous compliance monitoring required by §63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of this subpart. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

(h) *Ongoing compliance status reports for area sources.* The requirements of this paragraph do not alleviate affected area sources from complying with the requirements of State or Federal operating permit programs under 40 CFR part 71.

(1) The owner or operator of an affected source that is located at an area source site shall prepare a summary report to document the ongoing compliance status of the affected source. The report shall contain the information identified in paragraph (g)(3) of this section, shall be completed annually and retained on site, and made available to the Administrator upon request. The report shall be completed annually except as provided in paragraph (h)(2) of this section.

(2) *Reports of exceedances.* (i) If both of the following conditions are met, semiannual reports shall be prepared and submitted to the Administrator:

(A) The total duration of excess emissions (as indicated by the monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c)) is 1 percent or greater of the total operating time for the reporting period; and

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.

(ii) Once an owner or operator of an affected source reports an exceedance as defined in paragraph (h)(2)(i) of this section, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency under paragraph (h)(3) of this section is approved.

(iii) The Administrator 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.

(3) *Request to reduce frequency of ongoing compliance status reports.* (i) An owner or operator who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following conditions are met:

(A) For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;

(B) The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A of this part and this subpart; and

(C) The Administrator does not object to a reduced reporting frequency for the affected source, as provided in paragraphs (h)(3) (ii) and (iii) of this section.

(ii) The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change, and the Administrator does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Administrator may review information concerning the source's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Administrator to make a judgement about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce reporting frequency, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iii) As soon as the monitoring data required by §63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Administrator to reduce the reporting frequency as allowed by paragraph (h)(3) of this section.

(i) *Reports associated with trivalent chromium baths.* The requirements of this paragraph do not alleviate affected sources from complying with the requirements of State or Federal operating permit programs under title V. Owners or operators complying with the provisions of §63.342(e) are not subject to paragraphs (a) through (h) of this section, but must instead submit the following reports:

(1) Within 180 days after January 25, 1995, submit an initial notification that includes:

(i) The same information as is required by paragraphs (c)(1) (i) through (v) of this section; and

(ii) A statement that a trivalent chromium process that incorporates a wetting agent will be used to comply with §63.342(e); and

(iii) The list of bath components that comprise the trivalent chromium bath, with the wetting agent clearly identified; and

(2) Within 30 days of the compliance date specified in §63.343(a), a notification of compliance status that contains an update of the information submitted in accordance with paragraph (i)(1) of this section or a statement that the information is still accurate; and

(3) Within 30 days of a change to the trivalent chromium electroplating process, a report that includes:

(i) A description of the manner in which the process has been changed and the emission limitation, if any, now applicable to the affected source;

(ii) If a different emission limitation applies, the applicable information required by paragraph (c)(1) of this section; and

(iii) The notification and reporting requirements of paragraphs (d), (e), (f), (g), and (h) of this section, which shall be submitted in accordance with the schedules identified in those paragraphs.

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 62 FR 4465, Jan. 30, 1997, 62 FR 42921, Aug. 11, 1997; 69 FR 42897, July 19, 2004]

§ 63.348 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

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

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.340, 63.342(a) through (e) and (g), and 63.343(a).

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

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

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

[68 FR 37347, June 23, 2003]

Table 1 to Subpart N of Part 63—General Provisions Applicability to Subpart N

General provisions reference	Applies to subpart N	Comment
63.1(a)(1)	Yes	Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.
63.1(a)(6)	Yes	
63.1(a)(7)	Yes	
63.1(a)(8)	Yes	
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	§63.347(a) of subpart N also allows report submissions via fax and on electronic media.
63.1(a)(12)–(14)	Yes	
63.1(b)(1)	No	§63.340 of subpart N specifies applicability.

63.1(b)(2)	Yes	
63.1(b)(3)	No	This provision in subpart A is being deleted. Also, all affected area and major sources are subject to subpart N; there are no exemptions.
63.1(c)(1)	Yes	Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.
63.1(c)(2)	Yes	§63.340(e) of Subpart N exempts area sources from the obligation to obtain Title V operating permits.
63.1(c)(4)	Yes	
63.1(c)(5)	No	Subpart N clarifies that an area source that becomes a major source is subject to the requirements for major sources.
63.1(e)	Yes	
63.2	Yes	Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.
63.3	Yes	Other units used in subpart N are defined in that subpart.
63.4	Yes	
63.5(a)	Yes	Except replace the term “source” and “stationary source” in §63.5(a) (1) and (2) of subpart A with “affected sources.”
63.5(b)(1)	Yes	
63.5(b)(3)	Yes	Applies only to major affected sources.
63.5(b)(4)	No	Subpart N (§63.345) specifies requirements for the notification of construction or reconstruction for affected sources that are not major.
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	
63.5(d)(1)(i)	No	§63.345(c)(5) of subpart N specifies when the application or notification shall be submitted.
63.5(d)(1)(ii)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(d)(1)(iii)	Yes	Except information should be submitted with the Notification of Compliance Status required by §63.347(e) of subpart N.
63.5(d)(2)	Yes	Applies to major affected sources that are new or reconstructed except: (1) replace “source” in §63.5(d)(2) of subpart A with “affected source”; and (2) actual control efficiencies are submitted with the Notification of Compliance Status required by §63.347(e).
63.5(d)(3)–(4)	Yes	Applies to major affected sources that are new or reconstructed.

63.5(e)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(f)(1)	Yes	Except replace “source” in §63.5(f)(1) of subpart A with “affected source.”
63.5(f)(2)	No	New or reconstructed affected sources shall submit the request for approval of construction or reconstruction under §63.5(f) of subpart A by the deadline specified in §63.345(c)(5) of subpart N.
63.6(a)	Yes	
63.6(b)(1)–(2)	Yes	Except replace “source” in §63.6(b)(1)–(2) of part A with “affected source.”
63.6(b)(3)–(4)	Yes	
63.6(b)(5)	Yes	Except replace “source” in §63.6(b)(5) of subpart A with “affected source.”
63.6(b)(7)	No	Provisions for new area sources that become major sources are contained in §63.343(a)(4) of subpart N.
63.6(c)(1)–(2)	Yes	Except replace “source” in §63.6(c)(1)–(2) of subpart A with “affected source.”
63.6(c)(5)	No	Compliance provisions for existing area sources that become major sources are contained in §63.343(a)(3) of subpart N.
63.6(e)	No	§63.342(f) of subpart N contains work practice standards (operation and maintenance requirements) that override these provisions.
63.6(f)(1)	No	§63.342(b) of subpart N specifies when the standards apply.
63.6(f)(2)(i)–(ii)	Yes	
63.6(f)(2)(iii)	No	§63.344(b) of subpart N specifies instances in which previous performance test results for existing sources are acceptable.
63.6(f)(2)(iv)	Yes	
63.6(f)(2)(v)	Yes	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Subpart N does not contain any opacity or visible emission standards.
63.6(i)(1)	Yes	
63.6(i)(2)	Yes	Except replace “source” in §63.6(i)(2)(i) and (ii) of subpart A with “affected source.”
63.6(i)(3)	Yes	

63.6(i)(4)(i)	No	§63.343(a)(6) of subpart N specifies the procedures for obtaining an extension of compliance and the date by which such requests must be submitted.
63.6(i)(4)(ii)	Yes	
63.6(i)(5)	Yes	
63.6(i)(6)(i)	Yes	This paragraph only references “paragraph (i)(4) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(6)(ii)	Yes	
63.6(i)(7)	Yes	
63.6(i)(8)	Yes	This paragraph only references “paragraphs (i)(4) through (i)(6) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(9)	Yes	This paragraph only references “paragraphs (i)(4) through (i)(6) of this section” and “paragraphs (i)(4) and (i)(5) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(10)(i)–(iv)	Yes	
63.6(i)(10)(v)(A)	Yes	This paragraph only references “paragraph (i)(4)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(10)(v)(B)	Yes	
63.6(i)(11)	Yes	
63.6(i)(12)(i)	Yes	This paragraph only references “paragraph (i)(4)(i) or (i)(5) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(12)(ii)–(iii)	Yes	
63.6(i)(13)	Yes	
63.6(i)(14)	Yes	
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	

63.7(a)(2)(i)–(vi)	Yes	
63.7(a)(2)(ix)	Yes	
63.7(a)(3)	Yes	
63.7(b)(1)	No	§63.347(d) of subpart N requires notification prior to the performance test. §63.344(a) of subpart N requires submission of a site-specific test plan upon request.
63.7(b)(2)	Yes	
63.7(c)	No	§63.344(a) of subpart N specifies what the test plan should contain, but does not require test plan approval or performance audit samples.
63.7(d)	Yes	Except replace “source” in the first sentence of §63.7(d) of subpart A with “affected source.”
63.7(e)	Yes	Subpart N also contains test methods specific to affected sources covered by that subpart.
63.7(f)	Yes	§63.344(c)(2) of subpart N identifies CARB Method 425 as acceptable under certain conditions.
63.7(g)(1)	No	Subpart N identifies the items to be reported in the compliance test [§63.344(a)] and the timeframe for submitting the results [§63.347(f)].
63.7(g)(3)	Yes	
63.7(h)(1)–(2)	Yes	
63.7(h)(3)(i)	Yes	This paragraph only references “§63.6(i)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.7(h)(3)(ii)–(iii)	Yes	
63.7(h)(4)–(5)	Yes	
63.8(a)(1)	Yes	
63.8(a)(2)	No	Work practice standards are contained in §63.342(f) of subpart N.
63.8(a)(4)	No	
63.8(b)(1)	Yes	
63.8(b)(2)	No	§63.344(d) of subpart N specifies the monitoring location when there are multiple sources.
63.8(b)(3)	No	§63.347(g)(4) of subpart N identifies reporting requirements when multiple monitors are used.

63.8(c)(1)(i)	No	Subpart N requires proper maintenance of monitoring devices expected to be used by sources subject to subpart N.
63.8(c)(1)(ii)	No	§63.342(f)(3)(iv) of subpart N specifies reporting when the O&M plan is not followed.
63.8(c)(1)(iii)	No	§63.343(f)(2) identifies the criteria for whether O&M procedures are acceptable.
63.8(c)(2)–(3)	No	§63.344(d)(2) requires appropriate use of monitoring devices.
63.8(c)(4)–(7)	No	
63.8(d)	No	Maintenance of monitoring devices is required by §§63.342(f) and 63.344(d)(2) of subpart N.
63.8(e)	No	There are no performance evaluation procedures for the monitoring devices expected to be used to comply with subpart N.
63.8(f)(1)	Yes	
63.8(f)(2)	No	Instances in which the Administrator may approve alternatives to the monitoring methods and procedures of subpart N are contained in §63.343(c)(8) of subpart N.
63.8(f)(3)	Yes	
63.8(f)(4)	Yes	
63.8(f)(5)	Yes	
63.8(f)(6)	No	Subpart N does not require the use of CEM's.
63.8(g)	No	Monitoring data does not need to be reduced for reporting purposes because subpart N requires measurement once/day.
63.9(a)	Yes	
63.9(b)(1)(i)–(ii)	No	§63.343(a)(3) of subpart N requires area sources to comply with major source provisions if an increase in HAP emissions causes them to become major sources.
63.9(b)(1)(iii)	No	§63.347(c)(2) of subpart N specifies initial notification requirements for new or reconstructed affected sources.
63.9(b)(2)	No	§63.347(c)(1) of subpart N specifies the information to be contained in the initial notification.
63.9(b)(3)	No	§63.347(c)(2) of subpart N specifies notification requirements for new or reconstructed sources that are not major affected sources.
63.9(b)(4)	No	
63.9(b)(5)	No	

63.9(c)	Yes	This paragraph only references "§63.6(i)(4) through §63.6(i)(6)" for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension. Subpart N provides a different timeframe for submitting the request than §63.6(i)(4).
63.9(d)	Yes	This paragraph only references "the notification dates established in paragraph (g) of this section." But, §63.347 of subpart N also contains notification dates.
63.9(e)	No	Notification of performance test is required by §63.347(d) of subpart N.
63.9(f)	No	
63.9(g)	No	Subpart N does not require a performance evaluation or relative accuracy test for monitoring devices.
63.9(h)(1)–(3)	No	§63.347(e) of subpart N specifies information to be contained in the notification of compliance status and the timeframe for submitting this information.
63.9(h)(5)	No	Similar language has been incorporated into §63.347(e)(2)(iii) of subpart N.
63.9(h)(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)	No	§63.346(b) of subpart N specifies the records that must be maintained.
63.10(b)(3)	No	Subpart N applies to major and area sources.
63.10(c)	No	Applicable requirements of §63.10(c) have been incorporated into §63.346(b) of subpart N.
63.10(d)(1)	Yes	
63.10(d)(2)	No	§63.347(f) of subpart N specifies the timeframe for reporting performance test results.
63.10(d)(3)	No	Subpart N does not contain opacity or visible emissions standards.
63.10(d)(4)	Yes	
63.10(d)(5)	No	§63.342(f)(3)(iv) and §63.347(g)(3) of subpart N specify reporting associated with malfunctions.

63.10(e)	No	§63.347(g) and (h) of subpart N specify the frequency of periodic reports of monitoring data used to establish compliance. Applicable requirements of §63.10(e) have been incorporated into §63.347(g) and (h).
63.10(f)	Yes	
63.11	No	Flares will not be used to comply with the emission limits.
63.12–63.15	Yes	

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 70 FR 75345, Dec. 19, 2005]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart N—National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

Table 1 to Subpart N of Part 63—General Provisions Applicability to Subpart N

General provisions reference	Applies to subpart N	Comment
63.1(a)(1)	Yes	Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.
63.1(a)(6)	Yes	
63.1(a)(7)	Yes	
63.1(a)(8)	Yes	
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	§63.347(a) of subpart N also allows report submissions via fax and on electronic media.
63.1(a)(12)–(14)	Yes	
63.1(b)(1)	No	§63.340 of subpart N specifies applicability.
63.1(b)(2)	Yes	
63.1(b)(3)	No	This provision in subpart A is being deleted. Also, all affected area and major sources are subject to subpart N; there are no exemptions.
63.1(c)(1)	Yes	Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.
63.1(c)(2)	Yes	§63.340(e) of Subpart N exempts area sources from the obligation to obtain Title V operating permits.
63.1(c)(4)	Yes	
63.1(c)(5)	No	Subpart N clarifies that an area source that becomes a major source is subject to the requirements for major sources.

63.1(e)	Yes	
63.2	Yes	Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.
63.3	Yes	Other units used in subpart N are defined in that subpart.
63.4	Yes	
63.5(a)	Yes	Except replace the term “source” and “stationary source” in §63.5(a) (1) and (2) of subpart A with “affected sources.”
63.5(b)(1)	Yes	
63.5(b)(3)	Yes	Applies only to major affected sources.
63.5(b)(4)	No	Subpart N (§63.345) specifies requirements for the notification of construction or reconstruction for affected sources that are not major.
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	
63.5(d)(1)(i)	No	§63.345(c)(5) of subpart N specifies when the application or notification shall be submitted.
63.5(d)(1)(ii)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(d)(1)(iii)	Yes	Except information should be submitted with the Notification of Compliance Status required by §63.347(e) of subpart N.
63.5(d)(2)	Yes	Applies to major affected sources that are new or reconstructed except: (1) replace “source” in §63.5(d)(2) of subpart A with “affected source”; and (2) actual control efficiencies are submitted with the Notification of Compliance Status required by §63.347(e).
63.5(d)(3)–(4)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(e)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(f)(1)	Yes	Except replace “source” in §63.5(f)(1) of subpart A with “affected source.”
63.5(f)(2)	No	New or reconstructed affected sources shall submit the request for approval of construction or reconstruction under §63.5(f) of subpart A by the deadline specified in §63.345(c)(5) of subpart N.
63.6(a)	Yes	
63.6(b)(1)–(2)	Yes	Except replace “source” in §63.6(b)(1)–(2) of part A with “affected source.”
63.6(b)(3)–(4)	Yes	

63.6(b)(5)	Yes	Except replace “source” in §63.6(b)(5) of subpart A with “affected source.”
63.6(b)(7)	No	Provisions for new area sources that become major sources are contained in §63.343(a)(4) of subpart N.
63.6(c)(1)–(2)	Yes	Except replace “source” in §63.6(c)(1)–(2) of subpart A with “affected source.”
63.6(c)(5)	No	Compliance provisions for existing area sources that become major sources are contained in §63.343(a)(3) of subpart N.
63.6(e)	No	§63.342(f) of subpart N contains work practice standards (operation and maintenance requirements) that override these provisions.
63.6(f)(1)	No	§63.342(b) of subpart N specifies when the standards apply.
63.6(f)(2)(i)–(ii)	Yes	
63.6(f)(2)(iii)	No	§63.344(b) of subpart N specifies instances in which previous performance test results for existing sources are acceptable.
63.6(f)(2)(iv)	Yes	
63.6(f)(2)(v)	Yes	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Subpart N does not contain any opacity or visible emission standards.
63.6(i)(1)	Yes	
63.6(i)(2)	Yes	Except replace “source” in §63.6(i)(2)(i) and (ii) of subpart A with “affected source.”
63.6(i)(3)	Yes	
63.6(i)(4)(i)	No	§63.343(a)(6) of subpart N specifies the procedures for obtaining an extension of compliance and the date by which such requests must be submitted.
63.6(i)(4)(ii)	Yes	
63.6(i)(5)	Yes	
63.6(i)(6)(i)	Yes	This paragraph only references “paragraph (i)(4) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(6)(ii)	Yes	
63.6(i)(7)	Yes	

63.6(i)(8)	Yes	This paragraph only references “paragraphs (i)(4) through (i)(6) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(9)	Yes	This paragraph only references “paragraphs (i)(4) through (i)(6) of this section” and “paragraphs (i)(4) and (i)(5) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(10)(i)–(iv)	Yes	
63.6(i)(10)(v)(A)	Yes	This paragraph only references “paragraph (i)(4)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(10)(v)(B)	Yes	
63.6(i)(11)	Yes	
63.6(i)(12)(i)	Yes	This paragraph only references “paragraph (i)(4)(i) or (i)(5) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(12)(ii)–(iii)	Yes	
63.6(i)(13)	Yes	
63.6(i)(14)	Yes	
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	
63.7(a)(2)(i)–(vi)	Yes	
63.7(a)(2)(ix)	Yes	
63.7(a)(3)	Yes	
63.7(b)(1)	No	§63.347(d) of subpart N requires notification prior to the performance test. §63.344(a) of subpart N requires submission of a site-specific test plan upon request.
63.7(b)(2)	Yes	
63.7(c)	No	§63.344(a) of subpart N specifies what the test plan should contain, but does not require test plan approval or performance audit samples.

63.7(d)	Yes	Except replace “source” in the first sentence of §63.7(d) of subpart A with “affected source.”
63.7(e)	Yes	Subpart N also contains test methods specific to affected sources covered by that subpart.
63.7(f)	Yes	§63.344(c)(2) of subpart N identifies CARB Method 425 as acceptable under certain conditions.
63.7(g)(1)	No	Subpart N identifies the items to be reported in the compliance test [§63.344(a)] and the timeframe for submitting the results [§63.347(f)].
63.7(g)(3)	Yes	
63.7(h)(1)–(2)	Yes	
63.7(h)(3)(i)	Yes	This paragraph only references “§63.6(i)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.7(h)(3)(ii)–(iii)	Yes	
63.7(h)(4)–(5)	Yes	
63.8(a)(1)	Yes	
63.8(a)(2)	No	Work practice standards are contained in §63.342(f) of subpart N.
63.8(a)(4)	No	
63.8(b)(1)	Yes	
63.8(b)(2)	No	§63.344(d) of subpart N specifies the monitoring location when there are multiple sources.
63.8(b)(3)	No	§63.347(g)(4) of subpart N identifies reporting requirements when multiple monitors are used.
63.8(c)(1)(i)	No	Subpart N requires proper maintenance of monitoring devices expected to be used by sources subject to subpart N.
63.8(c)(1)(ii)	No	§63.342(f)(3)(iv) of subpart N specifies reporting when the O&M plan is not followed.
63.8(c)(1)(iii)	No	§63.343(f)(2) identifies the criteria for whether O&M procedures are acceptable.
63.8(c)(2)–(3)	No	§63.344(d)(2) requires appropriate use of monitoring devices.
63.8(c)(4)–(7)	No	
63.8(d)	No	Maintenance of monitoring devices is required by §§63.342(f) and 63.344(d)(2) of subpart N.

63.8(e)	No	There are no performance evaluation procedures for the monitoring devices expected to be used to comply with subpart N.
63.8(f)(1)	Yes	
63.8(f)(2)	No	Instances in which the Administrator may approve alternatives to the monitoring methods and procedures of subpart N are contained in §63.343(c)(8) of subpart N.
63.8(f)(3)	Yes	
63.8(f)(4)	Yes	
63.8(f)(5)	Yes	
63.8(f)(6)	No	Subpart N does not require the use of CEM's.
63.8(g)	No	Monitoring data does not need to be reduced for reporting purposes because subpart N requires measurement once/day.
63.9(a)	Yes	
63.9(b)(1)(i)–(ii)	No	§63.343(a)(3) of subpart N requires area sources to comply with major source provisions if an increase in HAP emissions causes them to become major sources.
63.9(b)(1)(iii)	No	§63.347(c)(2) of subpart N specifies initial notification requirements for new or reconstructed affected sources.
63.9(b)(2)	No	§63.347(c)(1) of subpart N specifies the information to be contained in the initial notification.
63.9(b)(3)	No	§63.347(c)(2) of subpart N specifies notification requirements for new or reconstructed sources that are not major affected sources.
63.9(b)(4)	No	
63.9(b)(5)	No	
63.9(c)	Yes	This paragraph only references “§63.6(i)(4) through §63.6(i)(6)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension. Subpart N provides a different timeframe for submitting the request than §63.6(i)(4).
63.9(d)	Yes	This paragraph only references “the notification dates established in paragraph (g) of this section.” But, §63.347 of subpart N also contains notification dates.
63.9(e)	No	Notification of performance test is required by §63.347(d) of subpart N.
63.9(f)	No	

63.9(g)	No	Subpart N does not require a performance evaluation or relative accuracy test for monitoring devices.
63.9(h)(1)–(3)	No	§63.347(e) of subpart N specifies information to be contained in the notification of compliance status and the timeframe for submitting this information.
63.9(h)(5)	No	Similar language has been incorporated into §63.347(e)(2)(iii) of subpart N.
63.9(h)(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)	No	§63.346(b) of subpart N specifies the records that must be maintained.
63.10(b)(3)	No	Subpart N applies to major and area sources.
63.10(c)	No	Applicable requirements of §63.10(c) have been incorporated into §63.346(b) of subpart N.
63.10(d)(1)	Yes	
63.10(d)(2)	No	§63.347(f) of subpart N specifies the timeframe for reporting performance test results.
63.10(d)(3)	No	Subpart N does not contain opacity or visible emissions standards.
63.10(d)(4)	Yes	
63.10(d)(5)	No	§63.342(f)(3)(iv) and §63.347(g)(3) of subpart N specify reporting associated with malfunctions.
63.10(e)	No	§63.347(g) and (h) of subpart N specify the frequency of periodic reports of monitoring data used to establish compliance. Applicable requirements of §63.10(e) have been incorporated into §63.347(g) and (h).
63.10(f)	Yes	
63.11	No	Flares will not be used to comply with the emission limits.
63.12–63.15	Yes	

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 70 FR 75345, Dec. 19, 2005]

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:	**K & I Hard Chrome, Inc.**
Source Location:	**1900 East Main Street, New Albany, Indiana 47150**
County:	**Floyd**
SIC Code:	**3471 (Electroplating, Plating, Polishing, Anodizing, and Coloring)**
Permit Renewal No.:	**M043-31142-00052**
Permit Reviewer:	**Janet Mobley**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from K & I Hard Chrome, Inc. relating to the operation of a hard and decorative chromium electroplating source. On November 15, 2011, K & I Hard Chrome, Inc. submitted an application to the OAQ requesting to renew its operating permit. K & I Hard Chrome, Inc. was issued its first MSOP Renewal (M043-15083-00052) on March 15, 2007.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) One (1) Hard Chromium Electroplating Operation (identified as System #2) with a maximum cumulative rectifier capacity of 170,520,000 Ampere-hours (A-hr) per year consisting of:

Six (6) hard chromium electroplating tanks, identified as #41, #42, #43, #44, #45 and #46, equipped with a composite mesh pad system, and exhausting to one (1) stack, identified as #2. Tanks #41, #42, and #45 were constructed in June 1988. Tank #43 was constructed in January 1989 and tank #46 was constructed in January 1990.

(b) One (1) Decorative Chromium Electroplating Operation (identified as System #4) with a maximum cumulative rectifier capacity of 23,520,000 Ampere-hours (A-hr) per year consisting of:

One (1) decorative chromium electroplating tank, identified as #5, constructed in September 2001, using a hexavalent chromium bath, equipped with a combination wetting agent type fume suppressant and foam blanket.

Under National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements (40 CFR Part 63, Subpart N), hard chromium electroplating tanks #41, #42, #43, #44, #45, and #46 are considered large hard chromium electroplating tanks, and decorative chromium tank #5 is considered a small decorative chromium electroplating tank.

(c) Three (3) electroless nickel plating systems, identified as #1, #2 and #3, using three (3) exhaust fans for control, exhausting to three (3) stacks identified as #4, #5 and #6.

(d) One (1) natural gas fired boiler, identified as Main Boiler, with a maximum heat input rate of 4.718 million (MM) British thermal units (Btu) per hour, exhausting through one (1) stack identified as #7.

(e) One (1) natural gas fired gas burner for tank, identified as Black Oxide, with a maximum heat input rate of 0.30 MMBtu per hour, exhausting through one (1) stack identified as #8.

(f) One (1) natural gas fired gas burner oven, identified as Oven, with a maximum heat input rate of 0.70 MMBtu per hour, exhausting through one (1) stack identified as #9.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source does not have any emission units that were constructed and/or are operating without a permit during this review.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(1) One (1) Hard Chromium Electroplating Operation (identified as System #1) with a maximum cumulative rectifier capacity of 42,336,000 Ampere-hours (A-hr) per year consisting of: Three (3) hard chromium electroplating tanks, identified as #31, #32 and #33, each constructed in January 1982, equipped with a composite mesh pad system, and exhausting to one (1) stack, identified as #1.

Note: The tanks, solutions and rectifiers associated with System #1 have been removed. The composite mesh pad system and exhausting stack remain in place but have been disconnected.

(2) One (1) Decorative Chromium Electroplating Operation (identified as System #3) with a maximum cumulative rectifier capacity of 5,880,000 Ampere-hours (A-hr) per year consisting of: One (1) decorative chromium electroplating tank, identified as #4, constructed in January 1976, using a hexavalent chromium bath, equipped with a combination wetting agent type fume suppressant and foam blanket, and exhausting to one (1) stack, identified as #3.

Note: All equipment and solutions associated with System #3 have been removed including the exhausting stack #3.

Existing Approvals

Since the issuance of the MSOP (M043-15083-00052) on March 15, 2007, the source has not constructed or has had additional approvals issued.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit.

All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Floyd County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective July 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Floyd County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005.
Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Floyd County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Floyd County as nonattainment for $PM_{2.5}$. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for $PM_{2.5}$ promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Floyd County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) Pursuant to 40 CFR 63.340(e), the source is an area source for chromium and is exempt from the obligation to obtain a permit under 40 CFR Part 70 or 71. Also the potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. However, the source performs hard chrome plating and pursuant to 326 IAC 2-6.1-3(a) any chromium electroplating source is subject to 326 IAC 2-6.1. Therefore, a Minor Source Operating Permit (MSOP) Renewal will be issued.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all regulated pollutants, excluding GHGs, is still less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. The PTE of all other regulated criteria pollutants are currently less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. Therefore, the source will be issued an MSOP Renewal.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

(d) 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, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM_{10}*	$PM_{2.5}$**	SO_2	NO_x	VOC	CO	GHGs CO_2e	Total HAPs	Worst Single HAP
Hard Chromium Electroplating Operation, System #2, Tanks (ID#41, #42, #43, #44, #45 and #46)	3.05	3.05	3.05	0.00	0.00	0.00	0.00	0.00	3.05	Chromium compounds <10 each
Decorative Chromium Electroplating Operation , System #4, Tank (#5)	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.06	Chromium compounds <10 each
Electroless Nickel Plating	0.43	0.43	0.43	0.52	0.00	0.00	0.00	0.00	0.43	Nickel
Natural Gas Combustion Units - Main Boiler, Black Oxide and Oven	0.05	0.19	0.19	0.02	2.50	0.14	2.10	3,023.67	0.05	
Total PTE of Entire Source	**3.64**	**3.78**	**3.78**	**0.54**	**2.50**	**0.14**	**2.10**	**3,023.67**	**3.58**	
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	N/A	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**$PM_{2.5}$ listed is direct $PM_{2.5}$.

** Even though the PTE of the entire sources is less than 25 tons per year, pursuant to 326 IAC 2-6.1-3(a), any chromium electroplating source is subject to 326 IAC 2-6.1 (MSOP).

MSOP Status

(a) This renewal will not change the minor status, because the unlimited potential to emit criteria pollutants from the entire source will still be less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-6.1 (MSOP). The source will be issued an MSOP Renewal.

(b) This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, emissions of GHGs are less than one hundred thousand (<100,000) tons of CO2 equivalent emissions (CO2e) per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

New Source Performance Standards (NSPS)

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

(b) The requirements for 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, are still not included in this permit for the natural gas fired boiler, identified as Main Boiler, with a maximum heat input rate of 4.718 MMBtu/hr because the boiler capacity is less than 10 MMBtu/hr.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(a) There are no new National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63) included in this permit renewal.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, Subpart DDDDD are not included in this permit, due to the source being an area source of HAPs and because the boiler capacity is less than 10 MMBtu/hr.

On June 8, 2007, the United States Court of Appeals for the District of Columbia Circuit (in NRDC v. EPA, no. 04-1386) vacated in its entirety the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. Additionally, since the state rule at 326 IAC 20-95 incorporated the requirements of the NESHAP 40 CFR 63, Subpart DDDDD by reference, the requirements of 326 IAC 20-95 are no longer effective. Therefore, the requirements of 40 CFR 63, Subpart DDDDD and 326 IAC 20-95 are still not included in the permit.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJ (6J), are not included in the permit for the natural gas-fired boiler, because gas-fired boiler, as defined in 40 CFR 63.11237, is specifically exempted from this rule as indicated in 40 CFR 63.11195(e).

(d) This source is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 20-8, (40 CFR 63.340, Subpart N) because this rule applies to each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing.

(1) Hard chrome electroplating tanks (#41, #42, #43, #44, #45 and #46)

The hard chrome electroplating tanks, identified as #41, #42, #43, #44, #45 and #46 are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 20-8, (40 CFR 63.340, Subpart N).

The hard chrome electroplating tanks, identified as #41, #42, #43, #44, #45, and #46 are considered large existing open surface hard chromium electroplating

operations because the combined maximum rectifier capacity of the electroplating tanks is greater than 60 million Ampere-hours per year. The tanks were constructed on or before January 25, 1995.

During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the hard chromium electroplating 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) of ventilation air (6.6×10^{-6} grains per dry standard cubic foot (gr/dscf)) for all open surface hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small hard chromium electroplating facilities.

The Permittee uses a composite mesh-pad system for control. The acceptable compliance range for pressure drop across the composite mesh-pad system at +/- 1 inch of water column for tanks (#41, #42, #43, #44, #45, and #46) at any time if a composite mesh-pad scrubber is used to demonstrate compliance. The Permittee has conducted all initial testing and notifications.

A performance test demonstrating initial compliance for tanks #41, #42, #43, #44, #45 and #46 was performed on March 11, 1997. During the initial performance test conducted on March 11, 1997, for tanks #41, #42, #43, #44, #45 and #46, it was determined that the average pressure drop across the composite mesh pad system was 2.8 inches of water and the average outlet chromium concentration was 0.0056 mg/dscm.

Non applicable portions of the NESHAP will not be included in the permit. The hard chrome electroplating tanks, identified as #41, #42, #43, #44, #45 and #46 are subject to the following portions of Subpart N.

(1) 40 CFR 63.340 (a).
(2) 40 CFR 63.340 (b).
(3) 40 CFR 63.340 (c).
(4) 40 CFR 63.340 (e).
(5) 40 CFR 63.341.
(6) 40 CFR 63.342 (a).
(7) 40 CFR 63.342 (b)(1).
(8) 40 CFR 63.342 (b)(2)(i).
(9) 40 CFR 63.342 (c)(1)(i).
(10) 40 CFR 63.342 (f)(1).
(11) 40 CFR 63.342 (f)(2).
(12) 40 CFR 63.342 (f)(3)(i).
(13) 40 CFR 63.342 (f)(3)(ii).
(14) 40 CFR 63.342 (f)(3)(iii).
(15) 40 CFR 63.342 (f)(3)(iv).
(16) 40 CFR 63.342 (f)(3)(v).
(17) 40 CFR 63.342 (f)(3)(vi).
(18) 40 CFR 63.342 (g).
(19) Table 1 CMP System
(20) Table 1 Stalagmometer Requirement
(21) 40 CFR 63.343 (a)(1)(ii).
(22) 40 CFR 63.343 (a)(3).
(23) 40 CFR 63.343 (a)(5).
(24) 40 CFR 63.343 (a)(6).
(25) 40 CFR 63.343 (c)(1).
(26) 40 CFR 63.343 (d).
(27) 40 CFR 63.344 (a).

(28) 40 CFR 63.344 (b)(1).
(29) 40 CFR 63.344 (b)(2).
(30) 40 CFR 63.344 (d)(1).
(31) 40 CFR 63.344 (d)(2)(ii).
(32) 40 CFR 63.344 (d)(5).
(33) 40 CFR 63.346 (a).
(34) 40 CFR 63.346 (b)(1).
(35) 40 CFR 63.346 (b)(2).
(36) 40 CFR 63.346 (b)(3).
(37) 40 CFR 63.346 (b)(4).
(38) 40 CFR 63.346 (b)(5).
(39) 40 CFR 63.346 (b)(6).
(40) 40 CFR 63.346 (b)(7).
(41) 40 CFR 63.346 (b)(8).
(42) 40 CFR 63.346 (b)(9).
(43) 40 CFR 63.346 (b)(10).
(44) 40 CFR 63.346 (b)(11).
(45) 40 CFR 63.346 (b)(12).
(46) 40 CFR 63.346 (b)(16).
(47) 40 CFR 63.346 (c).
(48) 40 CFR 63.347 (a).
(49) 40 CFR 63.347 (b).
(50) 40 CFR 63.347 (d).
(51) 40 CFR 63.347 (e). (excluding viii)
(52) 40 CFR 63.347 (f).
(53) 40 CFR 63.347 (h).
(54) 40 CFR 63.348.

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.

(2) Decorative chromium electroplating tank (#5)

The decorative chromium electroplating tank, identified #5, is a small decorative chromium electroplating tank that use a chromic acid bath located at an existing decorative chromium electroplating source. The Permittee uses a combination wetting agent type fume suppressant and foam blanket for control. The surface tension is measured to show compliance. Since the Permittee has accepted 35 dynes/cm as the maximum surface tension value that corresponds to compliance with the applicable emission limitation when using a tensiometer and a maximum surface tension value of 45 dynes/cm when using a stalagmometer, and uses a wetting agent in the plating bath, the Permittee is not required to conduct a performance test. The Permittee has submitted all initial notifications.

A performance test demonstrating initial compliance for tank #5 was performed on September 20, 2001. During the initial performance tests, it was determined that the average surface tension of the bath, using Method 306B, Appendix A of 40 CFR 63, was 20 dynes/cm for tank #5.

Non applicable portions of the NESHAP will not be included in the permit. The decorative chromium electroplating tank, identified as tank #5, is subject to the following portions of Subpart N.

(1) 40 CFR 63.340 (a).
(2) 40 CFR 63.340 (b).

(3) 40 CFR 63.340 (c).
(4) 40 CFR 63.340 (e).
(5) 40 CFR 63.341.
(6) 40 CFR 63.342 (a).
(7) 40 CFR 63.342 (b)(1).
(8) 40 CFR 63.342 (d)(1).
(9) 40 CFR 63.342 (d)(2).
(10) 40 CFR 63.342 (f)(1).
(11) 40 CFR 63.342 (f)(2).
(12) 40 CFR 63.342 (f)(3)(i)(A).
(13) 40 CFR 63.342 (f)(3)(i)(B).
(14) 40 CFR 63.342 (f)(3)(i)(C).
(15) 40 CFR 63.342 (f)(3)(i)(D).
(16) 40 CFR 63.342 (f)(3)(i)(E).
(17) 40 CFR 63.342 (f)(3)(ii).
(18) 40 CFR 63.342 (f)(3)(iii).
(19) 40 CFR 63.342 (f)(3)(iv).
(20) 40 CFR 63.342 (f)(3)(v).
(21) 40 CFR 63.342 (f)(3)(vi).
(22) 40 CFR 63.342 (g).
(23) Table 1 Stalagmometer Requirement
(24) 40 CFR 63.343 (a)(1)(i).
(25) 40 CFR 63.343 (a)(3).
(26) 40 CFR 63.343 (a)(6).
(27) 40 CFR 63.343 (b)(2)(i).
(28) 40 CFR 63.343 (b)(2)(ii).
(29) 40 CFR 63.343 (b)(2)(iii).
(30) 40 CFR 63.343 (c)(5).
(31) 40 CFR 63.346 (a).
(32) 40 CFR 63.346 (b)(1).
(33) 40 CFR 63.346 (b)(2).
(34) 40 CFR 63.346 (b)(3).
(35) 40 CFR 63.346 (b)(4).
(36) 40 CFR 63.346 (b)(5).
(37) 40 CFR 63.346 (b)(6).
(38) 40 CFR 63.346 (b)(7).
(39) 40 CFR 63.346 (b)(8).
(40) 40 CFR 63.346 (b)(9).
(41) 40 CFR 63.346 (b)(10).
(42) 40 CFR 63.346 (b)(11).
(43) 40 CFR 63.346 (b)(13).
(44) 40 CFR 63.346 (b)(16).
(45) 40 CFR 63.346 (c).
(46) 40 CFR 63.347 (a).
(47) 40 CFR 63.347 (b).
(48) 40 CFR 63.347 (d).
(49) 40 CFR 63.347 (e).
(50) 40 CFR 63.347 (f).
(51) 40 CFR 63.347 (h).
(52) 40 CFR 63.348.

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.

(3) Title V Exemption
Pursuant to 40 CFR 63.340(e), any hard or decorative chromium electroplating source that is an area source and is subject to this subpart is exempt from the obligation to obtain a permit under 40 CFR Part 70 or 71, provided that the source is not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than status as an area source under this subpart. The source must continue to comply with the provisions of this subpart applicable to area sources.

(4) Testing

The source has performed the testing that was required, and no additional testing is required.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Plating and Polishing Operations (40 CFR Part 63.11504, Subpart WWWWWW (6W), are not included in the permit for the source because process units that are subject to the requirements of 40 CFR part 62, Subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks) is specifically exempted from this rule as indicated in 40 CFR 63.11505(a)(d)(1).

State Rule Applicability - Entire Source

(a) 326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3 whenever a control device is required for compliance with any applicable emission limitations and/or air pollution control regulations. The use of a control device to limit the particulate emissions of PM, PM10 and PM2.5 to less than PSD and TV thresholds is required. Therefore a PMP is still required for these units and their associated control devices.

(b) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the unrestricted potential emissions section above.

(c) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
This source, constructed before August 7, 1977, is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and is not subject to the requirements of 326 IAC 2-2 (PSD). The potential emissions of all pollutants are less than 250 tons per year; therefore, this source continues to be a minor source and has had no major modifications and 326 IAC 2-2 (PSD) does not apply.

(d) 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR)
The requirements of 326 IAC 2-3 (Emission Offset) do not apply to this source because potential emissions of VOC are less than 25 tons per year and potential emissions of NOx are less than 100 tons per year. The potential to emit (PTE) of all criteria pollutants is less than one hundred (100) tons per year. Therefore, this source is a minor source and 326 IAC 2-3 (Emission Offset) does not apply. The source remains a minor source under 326 IAC 2-3.

(e) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1. The operation of the chromium electroplating tank at the source is subject to the NESHAP Subpart N. Therefore, 326 IAC 2-4.1 does not apply.

(f) 326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte

County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

(g) 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.

(h) 326 IAC 6-4 (Fugitive Dust Emissions)
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).

(i) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the potential fugitive particulate emissions are less than 25 tons per year. Fugitive particulate emissions and fugitive emissions are negligible.

(j) 326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

(k) 326 IAC 6.8 PM Limitations for Lake County
This source is not subject to 326 IAC 6.8 because it is not located in Lake County.

(l) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements (BACT))
This source was constructed prior to January 1, 1980. In addition, none of the emission units at this source have potential emissions of twenty-five (25) tons or more per year. Therefore, 326 IAC 8-1-6 (BACT) is not applicable to this source.

(m) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

State Rule Applicability – Individual Facilities

Natural Gas Combustion Units

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
The one (1) 4.718 MMBtu per hour boiler, identified as Main Boiler, which began operation after September 21, 1983, is subject to 326 IAC 6-2-4. Pursuant to this rule, particulate emissions from indirect heating facilities constructed after September 21, 1983, shall be limited by the following equation:

This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$ Where Q = total source capacity (MMBtu/hr)

For this unit, Q = 4.718 (MMBtu/hr) and Pt = $1.09/4.718^{0.26}$ = 0.78 pounds per MMBtu.

According to the equation above the allowable PM emission rate from Main Boiler is 0.78 pounds per MMBtu. However, pursuant to 326 IAC 6-2-4(a), indirect heating units which have a 10 MMBtu/hr heat input or less and which began operation after September 21, 1983, shall in no case exceed 0.6 lb/MMBtu heat input. Therefore PM emissions from the one (1) natural gas fired boiler identified as Main Boiler, rated at 4.718 MMBtu/hr, shall be limited to 0.6 lb/MMBtu heat input.

Based on the AP-42 emission factor for PM from combustion this boiler is able to comply with this limit.

Hard and Decorative Chromium Electroplating Tanks

326 IAC 6-3-1 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(6), the hard chromium electroplating operation, hard chromium electroplating tank, is exempt from the requirements of 326 IAC 6-3 because it has particulate matter limitations established under 326 IAC 20-8 (Hard and Decorative Chomium Electroplating and Chromium Anodizing Tanks). Therefore, 326 IAC 6-3 does not apply.

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

The State Only National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks Requirements [326 IAC 20-8] specified in the existing permit were removed in this renewal, because 326 IAC 20-8 incorporates by reference 40 CFR 63, Subpart N. The Permittee will comply with the provisions of 40 CFR 63, Subpart N as detailed in the Federal Rule Applicability section above.

The hard chromium electroplating tanks, identified as (#31, #32, #33 removed), #41, #42, #43, #44, #45, and #46 and decorative chromium electroplating tanks, identified as (#4 removed) and #5, were subject to 326 IAC 20-8-1 (Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks). 326 IAC 20-8 incorporates by reference 40 CFR 63, Subpart N. The Permittee will comply with the provisions of 40 CFR 63, Subpart N as detailed in the Federal Rule Applicability section above. The chromium electroplating facilities at this source are no longer subject to both versions of the rule.

See Federal Rule Applicability Section of this TSD.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations

These emission units are not subject to 326 IAC 326 IAC 7-1.1 because the SO_2 PTE (or limited SO_2 PTE) is less than 25 tons/year or 10 pounds/hour.

Compliance Determination, Monitoring and Testing Requirements

The compliance determination and monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Composite Mesh-pad system for tanks 41, 42, 43, 45 and 46	Pressure Drop 2.8 inches of water	Once per day

These monitoring conditions are necessary because the composite mesh-pad system for the Hard chromium electroplating operations must operate properly to ensure compliance with 40 CFR Part 63, Subpart N.

Wetting agent type fume suppressant and foam blanket controls Tank 5	Surface tension <45 dynes/cm	Once every 40 hours of operation if the surface tension is not exceeded on an ongoing basis

These monitoring conditions are necessary because the chemical fume suppressant system for the chromium electroplating operations must operate properly to ensure compliance with 40 CFR, Subpart N.

Since the Permittee has accepted 45 dynes/cm as the maximum surface tension value that corresponds to compliance with the applicable emission limitation and uses a wetting agent in the plating bath, the Permittee is not required to conduct any additional performance tests. The Permittee has submitted all initial notifications. No additional specific testing is required with the issuance of this renewal.

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 15, 2011.

Conclusion

The operation of this hard and decorative chromium electroplating source shall be subject to the conditions of the attached MSOP Renewal No. 043-31142-00052.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Janet Mobley at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5373 or toll free at 1-800-451-6027 extension 4-5373.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations
SUMMARY

Company Name: **K & I Hard Chrome, Inc.**
Address City IN Zip: **1900 E. Main Street, New Albany, Indiana 47150**
Permit Number: **043-31142-00052**
Reviewer: **Janet Mobley**

Uncontrolled POTENTIAL TO EMIT IN TONS PER YEAR										
Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	Total HAPs	Single HAPs
Hard Chromium Electroplating Operation, System #2, Tanks (ID#41, #42, #43, #44, #45 and #46)	3.05	3.05	3.05	0.00	0.00	0.00	0.00	0.00	3.05	Chromium Compounds <10 each
Decorative Chromium Electroplating Operation , System #4, Tank (#5)	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.06	Chromium Compounds <10 each
Electroless Nickel Plating	0.43	0.43	0.43	0.52	0.00	0.00	0.00	0.00	0.43	Nickel
Natural Gas Combustion Units - Main Boiler, Black Oxide and Oven	0.05	0.19	0.19	0.02	2.50	0.14	2.10	3,023.67	0.05	
TOTAL	**3.64**	**3.78**	**3.78**	**0.54**	**2.50**	**0.14**	**2.10**	**3023.67**	**3.58**	

PM10=PM=PM2.5

Appendix A: Emission Calculations
PM/PM10 and HAP Emissions
From Chromium Electroplating Tanks

Company Name: K & I Hard Chrome, Inc.
Address City IN Zip: 1900 E. Main Street, New Albany, Indiana 47150
Permit Number: 043-31142-00052
Reviewer: Janet Mobley

Max. Capacity (Amp)	Unit
170,520,000	System #2

These tanks are controlled by a chemical fume suppressant system.

Emission Factor in grains/A-hr	Emission Unit Chrome Tank (System #2	PM* 0.25	PM10* 0.25	Chromium Compounds 0.25
	Hard Chromium Plating Tanks (#41, #42, #43, #44, #45 and #46)	**3.05**	**3.05**	**3.05**
Potential to Emit before Control in tons/yr	**Total**	**3.05**	**3.05**	**3.05**

Emission factors are from AP-42, Chapter 12.20 Electroplating,Table 12.20-1 for Chromium Electroplating (07/96). SCC 3-09-010-18)

* Assume PM10 emissions are equal to PM & PM2.5 emissions.

Methodology:
PTE before Control (tons/yr) = Max. Capacity (A) x Emission Factor (grain/A-hr) x 1 lbs/7000 grains x 1 ton/2000 lbs

Appendix A: Emission Calculations
PM/PM10 and HAP Emissions
From Chromium Electroplating Tanks

Company Name: K & I Hard Chrome, Inc.
Address City IN Zip: 1900 E. Main Street, New Albany, Indiana 47150
Permit Number: 043-31142-00052
Reviewer: Janet Mobley

Max. Capacity (Amp)	Unit
23,520,000	System #4

These tanks are controlled by a chemical fume suppressant system.

	Emission Unit	PM*	PM10*	Chromium Compounds
Emission Factor in grains/A-hr	Chrome Tank ID#5	0.069	0.069	0.033
Potential to Emit before Control in tons/yr				
	Decorative Chromium Plating Tank (ID#5)	**0.12**	**0.12**	**0.06**
	Total	**0.12**	**0.12**	**0.06**

Emission factors are from AP-42, Table 12.20-1 for Chromium Electroplating (07/96).
* Assume PM10 emissions are equal to PM & PM2.5 emissions.

Methodology:
PTE before Control (tons/yr) = Max. Capacity (A) x Emission Factor (grain/A-hr) x 1 lbs/7000 grains x 1 ton/2000 lbs

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

Company Name: K & I Hard Chrome, Inc.
Address City IN Zip: 1900 E. Main Street, New Albany, Indiana 47150
Permit Number: 043-31142-00052
Reviewer: Janet Mobley

Facilities	MMBtu/hr
Boiler (Main Boiler)	4.718
Gas Burner for Tank (Black Oxide)	0.3
Gas Burner Oven (Oven)	0.7
Total	5.718

Heat Input Capacity	HHV	Potential Throughput
MMBtu/hr	mmBtu / mmscf	MMCF/yr
5.718	1000	50.1

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.05	0.19	0.19	0.02	2.50	0.14	2.10

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

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

Company Name: K & I Hard Chrome, Inc.
Address City IN Zip: 1900 E. Main Street, New Albany, Indiana 47150
Permit Number: 043-31142-00052
Reviewer: Janet Mobley

	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	5.259E-05	3.005E-05	1.878E-03	4.508E-02	8.515E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
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	1.252E-05	2.755E-05	3.506E-05	9.517E-06	5.259E-05

Methodology is the same as previous page.

Total HAPs	4.726E-02

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See next page for Greenhouse Gas calculations.

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

Company Name: K & I Hard Chrome, Inc.
Address City IN Zip: 1900 E. Main Street, New Albany, Indiana 47150
Permit Number: 043-31142-00052
Reviewer: Janet Mobley

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	3,005	0.1	0.1
Summed Potential Emissions in tons/yr	3,005		
CO2e Total in tons/yr	3,024		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

updated 7/11

Appendix A: Emission Calculations
Non-Chromium Electroplating Process
Electroless Nickel

Company Name: **K & I Hard Chrome, Inc.**
Address City IN Zip: **1900 E. Main Street, New Albany, Indiana 47150**
Permit Number: **043-31142-00052**
Reviewer: **Janet Mobley**

Maximum Process Throughput:	4565	Gallons per year total
OMG Electroless Nickel Part A	6.00%	% Mixture for this ingredent
Nickel Sulfate	30.00%	% Nickel Sulfate
PM/PM10/PM2.5 emissions (tons/year) =	0.43	
HAP (Nickel) emissions (tons/year) =	0.43	
SOx Emissions (tons/yr) =	0.52	

Methodology:
PM/HAP (Nickel)
PM/HAP emissions (tons/year) = (Maximum Process Throughput) * (% Mixture) * (%Nickel Sulfate)* (10.5lbs/1 gal) * 1 ton/2000 lbs)
SOx
Sox emissions (tons/year) = (Maximum Process Throughput) * (% Mixture) * (%Nickel Sulfate) * (1.235 Specific Gravity) * (10.5lbs/1 gal) * 1 ton/2000 lbs)

Source submitted maximum process throughput gal/year total

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Todd Sparrow
K & I Hard Chrome, Inc.
1900 E Main St
New Albany, IN 47150

DATE: April 12, 2012

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

SUBJECT: Final Decision
MSOP
043-31142-00052

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

April 12, 2012

TO: New Albany Floyd Co Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: K & I Hard Chrome, Inc.
Permit Number: 043-31142-00052

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 4/12/2012 K & I Hard Chrome, Inc.043- 31142-00052 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Todd Sparrow K & I Hard Chrome, Inc. 1900 E Main St New Albany IN 47150 (Source CAATS)									
2		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 *(Affected Party)*									
3		Floyd County Commissioners 311-319 West 1st St, Rm 214 New Albany IN 47150 *(Local Official)*									
4		New Albany City Council and Mayors Office City County Building #316 New Albany IN 47150 *(Local Official)*									
5		New Albany Floyd Co Public Library 180 W Spring St New Albany IN 47150-3692 *(Library)*									
6		Floyd County Health Department 1917 Bono Rd New Albany IN 47150-4607 *(Health Department)*									
7		Ms. Sue Green 1985 Kepley Road Georgetown IN 47122 *(Affected Party)*									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877