NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a New Source Review and Minor Source Operating Permit (MSOP) for Dormakaba USA Inc. in Marion County

MSOP Renewal No.: M097-41387-00119

The Indiana Department of Environmental Management (IDEM) has received an application from Dormakaba USA Inc., located at 6161 East 75th Street, Indianapolis, IN 46250, for a new source review and renewal of its MSOP issued on August 25, 2009. If approved by IDEM’s Office of Air Quality (OAQ), this proposed permit would allow Dormakaba USA Inc. to make certain changes at its existing source. Dormakaba USA Inc. has applied to a Minor Source Operating Permit (MSOP) Renewal with New Source Review (NSR).

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft permit contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

A copy of the permit application and IDEM’s preliminary findings are available at:

Indianapolis Public Library - Lawrence Branch
7898 Hague Road
Indianapolis, IN 46256

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

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing,
you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M097-41387-00119 in all correspondence.

Comments should be sent to:

Mena Mekhail
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Mena Mekhail or (317) 234-7434
Or dial directly: (317) 234-7434
Fax: (317) 232-6749 attn: Mena Mekhail
E-mail: mmekhail@idem.in.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm, and the Citizens’ Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM’s response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Mena Mekhail of my staff at the above address.

[Signature]
Heath Harley, Section Chief
Permits Branch
Office of Air Quality
Minor Source Operating Permit Renewal w/ New Source Review (NSR)

OFFICE OF AIR QUALITY

Dormakaba USA Inc.
6161 East 75th Street
Indianapolis, Indiana 46250

(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.: M097-41387-00119
Master Agency Interest ID: 10851

Issued by:

Heath Hartley, Section Chief
Permits Branch
Office of Air Quality

Issuance Date:
Expiration Date:
# TABLE OF CONTENTS

## SECTION A  SOURCE SUMMARY ......................................................................................................... 5

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

## SECTION B  GENERAL CONDITIONS ................................................................................................... 8

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 13-3 0-3-1]
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]

## SECTION C  SOURCE OPERATION CONDITIONS ............................................................................. 13

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]........................................................................... 13
C.1 Permit Revocation [326 IAC 2-1.1-9]
C.2 Opacity [326 IAC 5-1]
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]
C.5 Fugitive Dust Emissions [326 IAC 6-4]
C.6 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)] .......................................................................................... 15
C.7 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11] .......................................................................................... 15
C.8 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)] ................................................................. 15
C.9 Compliance Monitoring [326 IAC 2-1.1-11]
C.10 Instrument Specifications [326 IAC 2-1.1-11]

Corrective Actions and Response Steps ..................................................................................................... 16
C.11 Response to Excursions or Exceedances
C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)] ............................................................ 17
C.13 Malfunctions Report [326 IAC 1-6-2]
C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]
C.15 General Reporting Requirements [326 IAC 2-1.1-11][326 IAC 2-6.1-2][IC 13-14-1-13]
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS .............................................................................................................................. 19

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 19

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

D.1.3 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Record Keeping and Reporting Requirement [326 IAC 2-6.1-5(a)(2)] .............................................................................................................................. 20

D.1.4 Record Keeping Requirements

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS .............................................................................................................................. 21

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 21

D.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(h)]

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)] .............................................................................................................................. 21

D.2.3 Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)]

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS .............................................................................................................................. 22

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 23

D.3.1 Particulate Matter (PM) [326 IAC 6.5-1-2(b)(3)]

D.3.2 Preventive Maintenance Plan [326 IAC 1-6-3]

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS .............................................................................................................................. 24

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 24

D.4.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

D.4.2 Particulate Emission Limitations [326 IAC 6-3-2]

D.4.3 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements [326 IAC 2-6.1-5(a)(2)] .............................................................................................................................. 25

D.4.4 Particulate Control

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)] .............................................................................................................................. 25

D.4.5 Baghouse Inspections

D.4.6 Broken or Failed Bag Detection

SECTION E.1 NESHAP .............................................................................................................................................................................................. 26

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 26


E.1.2 Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks NESHAP [40 CFR Part 63, Subpart N] [326 IAC 20-8]

SECTION E.2 NESHAP .............................................................................................................................................................................................. 28

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 28


E.2.2 Plating and Polishing Operations NESHAP [40 CFR Part 63, Subpart WWWWWW]

SECTION E.3 NESHAP .............................................................................................................................................................................................. 29

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5(a)(1)] .............................................................................................................................. 29


E.3.2 Stationary Reciprocating Internal Combustion Engines (RICE) NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]
ANNUAL NOTIFICATION ...................................................................................................................................... 31
MALFUNCTION REPORT ..................................................................................................................................... 32
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 security products manufacturing operation.

| Source Address: | 6161 East 75th Street, Indianapolis, Indiana 46250 |
| General Source Phone Number: | 317-849-2250 |
| SIC Code: | 3429 (Hardware, Not Elsewhere Classified), 3471 (Electroplating, Plating, Polishing, Anodizing, and Coloring) |
| County Location: | Marion Outside Center, Perry, and Wayne Townships |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Minor Source Operating Permit Program |

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) cold cleaner degreasing operation, identified as U1, consisting of cold cleaner degreasing dip tanks without a remote solvent reservoir and utilizing 5200 gallons of non-VOC containing solvent (bio-circle) a year.

(b) One (1) Pero solvent cleaning vacuum degreasing operation, identified as U7, constructed in 2012, consisting of a sealed degreasing unit, with a remote solvent reservoir with a 220 gallon solvent tank and using 832 gallons of n-Propyl Bromide or M6386 solvent a year. Spent cleaning solvent is shipped off-site for recycling or treatment.

(c) One (1) buffing/sanding/polishing operation, identified as U2, using brass, bronze and steel barstock as raw material with a maximum rate of 380 lb/hr, and particulate emissions controlled by nineteen (19) dust collectors, exhausting indoors.

(d) One (1) decorative chromium electroplating operation, identified as U3, installed in December 1989, consisting of one decorative chromium electroplating tank and hexavalent chromium bath with a maximum rectifier capacity of 3,000 amps and a maximum cumulative rectifier capacity of 17,640,000 amp-hours, equipped with a packed-bed scrubber and composite mesh-pad mist eliminator for chromium control, exhausting to stack S1.

[Under 40 CFR 63, Subpart N, this unit is considered an affected facility]

(e) One (1) nickel plating operation, identified as U4, installed in December 1989, consisting of one (1) automatic nickel plate tank with a rectifier capacity of 4,000 amps and a manual bright nickel plater with a rectifier capacity of 500 amps equipped with a wet scrubber/evaporator for nickel control, exhausting to stack S2.
[Under 40 CFR 63, Subpart WWWW, this unit is considered an affected facility.]

(f) One (1) HVLP surface coating spray booth for coating brass locks and booth wells, identified as U5, installed in January 1985, with a maximum of 0.0008 gallons per unit and 70 units per hour, with dry filters for particulate control and exhausting to stack S3.

(g) One (1) HVLP surface coating spray booth for coating mullions, Ryobi arms and vertical rods, identified as U6, installed in September 2007, with a maximum of 0.0009 gallons per unit and 65 units per hour, with dry filters for particulate control and exhausting to S4.

(h) Five (5) robotic polishing operations, identified as RP-A, RP-B, RP-C, RP-D, and RP-E, where RP-A through RP-D have a maximum combined throughput of 200 parts per hour, and RP-E has a maximum throughput capacity of 120 parts per hour, RP-A and RP-B constructed in 2009, RP-C and RP-D constructed in 2016, and RP-E approved in 2019 for construction, and each equipped with a baghouse for particulate emissions, and exhausting inside the building.

(i) One (1) inert gas welding/flame-cutting operation, identified as Welding/Flame Cutting-#1, with a maximum input rate of 0.06 lbs/hr of wire and flame cutting utilizing oxygen acetylene with a maximum metal thickness of 1 1/8 inch and 2 in/min cutting rate.

(j) One (1) Powder Coating Line, identified as Powder Coating Operation, installed in December 1993, consisting of spray booth, two (2) guns with maximum capacity of 3.75 pounds of powder per hour each, a natural gas-fired dryer and curing oven, with maximum heat input rates of 0.20, 0.80 and 0.80 MMBtu/hr, respectively and emission controlled by a baghouse.

(k) Two (2) natural gas fueled electric emergency generators, identified as Generator-1, installed in 2000, and Generator 3, installed in April 2007, with output rates of 60 KW/hr and 130 KW/hr and maximum heat input rates of 1.005 and 2.17 MMBtu/hr, respectively.

[Under 40 CFR 63, Subpart ZZZZ (4Z), the above emission units are considered affected facilities.]

(l) One (1) natural gas fueled boiler, identified as 3000 Boiler Room - A, installed in January 2013, with a maximum heat input rate of 1.99 MMBtu/hr, exhausting through a stack.

(m) One (1) natural gas fueled boiler, identified as old 3000 Boiler Room - B, installed in July 1986, with a maximum heat input rate of 2.4 MMBtu/hr, exhausting through a stack.

(n) One (1) natural gas fueled boiler, identified as Plating 1000, installed in January 2010, with a maximum heat input rate of 2.05 MMBtu/hr, exhausting through a stack.

(o) One (1) natural gas fueled boiler, identified as 1000 Boiler Room, installed in March 2013, with a maximum heat input rate of 1.50 MMBtu/hr.

(p) Three (3) natural gas fueled water heaters, identified as Restrooms, with a combined maximum heat input rate of 0.92 MMBtu per hour.

(q) Thirty-One (31) natural gas fueled space heating units, identified as HV/AC Units, with a combined maximum heat input rate of 7.16 MMBtu per hour.

(r) Four (4) natural gas fueled air make up units, identified as Hartzell Units, with a combined maximum heat input rate of 10 MMBtu/hr.
(s) Miscellaneous cleaner/coating/solvent usage with maximum throughput of 2,190 gallons per year.

(t) Twenty-eight (28) wet machining operations, each with a nominal air flow rate of 1,000 acfm, and each equipped with a mist collector for particulate control and exhausting indoors.

(u) One (1) parts washer, approved in 2019 for construction, with a maximum usage of three hundred sixty (360) gallons of M2750 solvent a year.

(v) One (1) metal hinge saw for cutting the raw material for hinge manufacturing, approved in 2019 for construction, with a maximum capacity of 100 hinges per day, equipped with a dust collector for particulate control and exhausting indoors.
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, M097-41387-00119, 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 M097-41387-00119 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 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.2 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 thirty percent (30%) 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.3 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.4 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.5 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.6 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.7 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.8 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.9 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.10 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. The analog instrument shall be capable of measuring values outside of the normal range.

(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.11 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.12 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.13 Malfunctions Report [326 IAC 1-6-2]

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

(a) A record of all malfunctions, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and 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 emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.

(c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

(b) Unless otherwise specified in this permit, 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.15 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) cold cleaner degreasing operation, identified as U1, consisting of cold cleaner degreasing dip tanks without a remote solvent reservoir and utilizing 5200 gallons of non-VOC containing solvent (bio-circle) a year.

(u) One (1) parts washer, approved in 2019 for construction, with a maximum usage of three hundred sixty (360) gallons of M2750 solvent a year.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall:

(a) Ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

(2) Equip the degreaser with a facility for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the degreaser.

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.

(5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).

(6) Store waste solvent only in covered containers

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) Ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the
department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:
   (A) must be a solid, fluid stream; and
   (B) shall be applied at a pressure that does not cause excessive splashing.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

D.1.3 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

D.1.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

(1) The name and address of the solvent supplier.

(2) The date of purchase (or invoice/bill dates of contract servicer indicating service date).

(3) The type of solvent purchased.

(4) The total volume of the solvent purchased.

(5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Section C - General Record Keeping Requirements contains the Permittee’s obligations with regard to the records required by this condition.
SECTION D.2  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) One (1) HVLP surface coating spray booth for coating brass locks and booth wells, identified as U5, installed in January 1985, with a maximum of 0.0008 gallons per unit and 70 units per hour, with dry filters for particulate control and exhausting to stack S3.

(g) One (1) HVLP surface coating spray booth for coating mullions, Ryobi arms and vertical rods, identified as U6, installed in September 2007, with a maximum of 0.0009 gallons per unit and 65 units per hour, with dry filters for particulate control and exhausting to S4.

(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.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(h)]

(a) Pursuant to 326 IAC 6.5-1-2(h), the PM emissions from the surface coating operation in the electrostatic surface coating spray booths, identified as U5 and U6, shall operate the control device in accordance with the manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four hours after such observation:

(1) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(c) If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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

D.2.3 Record Keeping Requirements [326 IAC 2-6.1-5(a)(2)]

(a) To document the compliance status with Condition D.2.1(c), the Permittee shall maintain a record of any actions taken if overspray is visibly detected.

(b) Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition.
SECTION D.3  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) decorative chromium electroplating operation, identified as U3, installed in December 1989, consisting of one decorative chromium electroplating tank and hexavalent chromium bath with a maximum rectifier capacity of 3,000 amps and a maximum cumulative rectifier capacity of 17,640,000 amp-hours, equipped with a packed-bed scrubber and composite mesh-pad mist eliminator for chromium control, exhausting to stack S1.

[Under 40 CFR 63, Subpart N, this unit is considered an affected facility]

(e) One (1) nickel plating operation, identified as U4, installed in December 1989, consisting of one (1) automatic nickel plate tank with a rectifier capacity of 4,000 amps and a manual bright nickel plater with a rectifier capacity of 500 amps equipped with a wet scrubber/evaporator for nickel control, exhausting to stack S2.

[Under 40 CFR 63, Subpart WWWW, this unit is considered an affected facility.]

(i) One (1) inert gas welding/flame-cutting operation, identified as Welding/Flame Cutting-#1, with a maximum input rate of 0.06 lbs/hr of wire and flame cutting utilizing oxygen acetylene with a maximum metal thickness of 1 1/8 inch and 2 in/min cutting rate.

(k) Two (2) natural gas fueled electric emergency generators, identified as Generator-1, installed in 2000, and Generator 3, installed in April 2007, with output rates of 60 KW/hr and 130 KW/hr and maximum heat input rates of 1.005 and 2.17 MMBtu/hr, respectively.

[Under 40 CFR 63, Subpart ZZZZ (4Z), the above emission units are considered affected facilities.]

(l) One (1) natural gas fueled boiler, identified as 3000 Boiler Room - A, installed in January 2013, with a maximum heat input rate of 1.99 MMBtu/hr, exhausting through a stack.

(m) One (1) natural gas fueled boiler, identified as old 3000 Boiler Room - B, installed in July 1986, with a maximum heat input rate of 2.4 MMBtu/hr, exhausting through a stack.

(n) One (1) natural gas fueled boiler, identified as Plating 1000, installed in January 2010, with a maximum heat input rate of 2.05 MMBtu/hr, exhausting through a stack.

(o) One (1) natural gas fueled boiler, identified as 1000 Boiler Room, installed in March 2013, with a maximum heat input rate of 1.50 MMBtu/hr.

(p) Three (3) natural gas fueled water heaters, identified as Restrooms, with a combined maximum heat input rate of 0.92 MMBtu per hour.

(q) Thirty-One (31) natural gas fueled space heating units, identified as HV/AC Units, with a combined maximum heat input rate of 7.16 MMBtu per hour.

(r) Four (4) natural gas fueled air make up units, identified as Hartzell Units, with a combined maximum heat input rate of 10 MMBtu/hr.

(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.3.1 Particulate Matter (PM) [326 IAC 6.5-1-2(b)(3)]

(a) Pursuant to 326 IAC 6.5-1-2(b)(3), particulate matter (PM) emissions from the natural gas boilers shall not exceed 0.01 grain per dry standard cubic foot (dscf).

(b) Pursuant to 326 IAC 6.5-1-2(b)(3), particulate matter (PM) emissions from the natural gas heaters and powder coating oven shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

D.3.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and any 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.4  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) buffing/sanding/polishing operation, identified as U2, using brass, bronze and steel barstock as raw material with a maximum rate of 380 lb/hr, and particulate emissions controlled by nineteen (19) dust collectors, exhausting indoors.

(h) Five (5) robotic polishing operations, identified as RP-A, RP-B, RP-C, RP-D, and RP-E, where RP-A through RP-D have a maximum combined throughput of 200 parts per hour, and RP-E has a maximum throughput capacity of 120 parts per hour, RP-A and RP-B constructed in 2009, RP-C and RP-D constructed in 2016, and RP-E approved in 2019 for construction, and each equipped with a baghouse for particulate emissions, and exhausting inside the building.

(i) One (1) inert gas welding/flame-cutting operation, identified as Welding/Flame Cutting-#1, with a maximum input rate of 0.06 lbs/hr of wire and flame cutting utilizing oxygen acetylene with a maximum metal thickness of 1 1/8 inch and 2 in/min cutting rate.

(j) One (1) Powder Coating Line, identified as Powder Coating Operation, installed in December 1993, consisting of spray booth, two (2) guns with maximum capacity of 3.75 pounds of powder per hour each, a natural gas-fired dryer and curing oven, with maximum heat input rates of 0.20, 0.80 and 0.80 MMBtu/hr, respectively and emission controlled by a baghouse.

(s) Miscellaneous cleaner/coating/solvent usage with maximum throughput of 2,190 gallons per year.

(t) Twenty-eight (28) wet machining operations, each with a nominal air flow rate of 1,000 acfm, and each equipped with a mist collector for particulate control and exhausting indoors.

(v) One (1) metal hinge saw for cutting the raw material for hinge manufacturing, approved in 2019 for construction, with a maximum capacity of 100 hinges per day, equipped with a dust collector for particulate control and exhausting indoors.

(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.4.1 Particulate Matter (PM)  [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from the above listed emission units shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.4.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the polishing operation shall not exceed the values shown in the table below:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>P (ton/hr)</th>
<th>E (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP-A</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-B</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-C</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-D</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-E</td>
<td>0.09</td>
<td>0.62</td>
</tr>
</tbody>
</table>
The pounds per hour limitation was calculated with the following equation:

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

\[ E = 4.10 P^{0.67} \]

Where 
\( E \) = rate of emission in pounds per hour; and 
\( P \) = process weight rate in tons per hour

D.4.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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

D.4.4 Particulate Control

In order to comply with condition D.4.1 and D.4.2, the mist collectors, dust collectors and baghouses shall be in operation and control particulate matter from the emission units listed above at all times when any of these units are in operation.

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

D.4.5 Baghouse Inspections

The Permittee shall perform semi-annual inspections of the dust collectors controlling particulate from the buffing/sanding/polishing operation (U2) to verify that they are being operated and maintained in accordance with the manufacturer's specifications. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.4.6 Broken or Failed Bag Detection

(a) For a single compartment dry filter and dust collectors controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.
SECTION E.1 NESHAP

Emissions Unit Description:

(d) One (1) decorative chromium electroplating operation, identified as U3, installed in December 1989, consisting of one decorative chromium electroplating tank and hexavalent chromium bath with a maximum rectifier capacity of 3,000 amps and a maximum cumulative rectifier capacity of 17,640,000 amp-hours, equipped with a packed-bed scrubber and composite mesh-pad mist eliminator for chromium control, exhausting to stack S1.

[Under 40 CFR 63, Subpart N, this unit is considered an affected facility]

(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(a)(1)]


(a) Pursuant to 40 CFR 63.1 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, for the emission unit(s) listed above, 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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.1.2 Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks NESHAP [40 CFR Part 63, Subpart N] [326 IAC 20-8]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart N (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-8, for the emission unit(s) listed above:

(1) 40 CFR 63.340 (a), (b), (c), and (e).
(2) 40 CFR 63.341.
(3) 40 CFR 63.342 (a), (b)(1), (d), (f), and (g).
(4) Table 1 Stalagmometer Requirement
(5) 40 CFR 63.343 (a)(1)(i), (a)(3), (a)(6), (b)(1), (b)(2), and (c)(5).
(6) 40 CFR 63.346 (a), (b)(1) - (b)(11), (b)(13), (b)(16), and (c).
(7) 40 CFR 63.347 (a), (b), (c), (d), (e), (f), and (h).
(8) 40 CFR 63.348.
(9) 40 CFR 63, Subpart N, Table 1
SECTION E.2 NESHAP

Emissions Unit Description:

(e) One (1) nickel plating operation, identified as U4, installed in December 1989, consisting of one (1) automatic nickel plate tank with a rectifier capacity of 4,000 amps and a manual bright nickel plater with a rectifier capacity of 500 amps equipped with a wet scrubber/evaporator for nickel control, exhausting to stack S2.

[Under 40 CFR 63, Subpart WWWW, this unit is considered an affected facility.]

(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(a)(1)]


(a) Pursuant to 40 CFR 63.1 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart WWWW.

(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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.2.2 Plating and Polishing Operations NESHAP [40 CFR Part 63, Subpart WWWW]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart WWWW (included as Attachment B to the operating permit), for the emission unit(s) listed above:

1. 40 CFR 63.11504 (a)(1)(i) and (a)(2)
2. 40 CFR 63.11505 (a)(1) and (b)
3. 40 CFR 63.11506 (a)
4. 40 CFR 63.11507 (a) and (g)
5. 40 CFR 63.11508 (a), (b), (c)(2), (d)(1), (d)(2), (d)(4), and (d)(8)
6. 40 CFR 63.11509 (a)(1), (a)(2), (a)(3), (b), (c)(2), (c)(6), (c)(7), (d), (e), and (f)
7. 40 CFR 63.115010
8. 40 CFR 63.115011
9. 40 CFR 63.115012
10. 40 CFR 63, Subpart WWWW, Table 1
SECTION E.3  NESHAP

Emissions Unit Description:

(k)  Two (2) natural gas fueled electric emergency generators, identified as Generator-1, installed in 2000, and Generator 3, installed in April 2007, with output rates of 60 KW/hr and 130 KW/hr and maximum heat input rates of 1.005 and 2.17 MMBtu/hr, respectively.

[Under 40 CFR 63, Subpart ZZZZ (4Z), the above emission units are considered affected facilities.]

(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(a)(1)]


(a)  Pursuant to 40 CFR 63.1 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.3.2  Stationary Reciprocating Internal Combustion Engines (RICE) NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the above listed emissions units, as specified as follows:

(a)  Generator-1:

(1)  40 CFR 63.6580
(2)  40 CFR 63.6585
(3)  40 CFR 63.6590(a)(1)(iii) and (iv)
(4)  40 CFR 63.6595(a)(1), (b), and (c)
(5)  40 CFR 63.6603(a)
(6)  40 CFR 63.6605
(7)  40 CFR 63.6625(e)(3), (f), (h), and (j)
(8)  40 CFR 63.6635
(9) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
(10) 40 CFR 63.6645(a)(5)
(11) 40 CFR 63.6650
(12) 40 CFR 63.6655
(13) 40 CFR 63.6660
(14) 40 CFR 63.6665
(15) 40 CFR 63.6670
(16) 40 CFR 63.6675
(17) Table 2d (item 5)
(18) Table 6 (item 9)
(19) Table 8

(b) Generator-3:
(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
(4) 40 CFR 63.6595(a)(6)
(5) 40 CFR 63.6665
(6) 40 CFR 63.6670
(7) 40 CFR 63.6675
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).

<table>
<thead>
<tr>
<th><strong>Company Name:</strong></th>
<th>Dormakaba USA Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address:</strong></td>
<td>6161 East 75th Street</td>
</tr>
<tr>
<td><strong>City:</strong></td>
<td>Indianapolis, Indiana 46250</td>
</tr>
<tr>
<td><strong>Phone #:</strong></td>
<td>317-849-2250</td>
</tr>
<tr>
<td><strong>MSOP #:</strong></td>
<td>M097-41387-00119</td>
</tr>
</tbody>
</table>

I hereby certify that Dormakaba USA Inc. is:

- □ still in operation.
- □ no longer in operation.

I hereby certify that Dormakaba USA Inc. is:

- □ in compliance with the requirements of MSOP M097-41387-00119.
- □ not in compliance with the requirements of MSOP M097-41387-00119.

<table>
<thead>
<tr>
<th><strong>Authorized Individual (typed):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title:</strong></td>
</tr>
<tr>
<td><strong>Signature:</strong></td>
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<tr>
<td><strong>Date:</strong></td>
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</tbody>
</table>

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.

<table>
<thead>
<tr>
<th><strong>Noncompliance:</strong></th>
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</thead>
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**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:** ________________  
**INSPECTION:** ________________

**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

PAGE 1 OF 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:

________________________________________________________________________
________________________________________________________________________
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.


§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).
**Affirmative defense** means, in the context of an enforcement proceeding, a response or a defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

**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 (CrO₃).

**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.

**Contains hexavalent chromium** means, the substance consists of, or contains 0.1 percent or greater by weight, chromium trioxide, chromium (VI) oxide, chromic acid, or chromic anhydride.

**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/m²) 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.
Existing affected source means an affected hard chromium electroplating tank, decorative chromium electroplating tank, or chromium anodizing tank, the construction or reconstruction of which commenced on or before February 8, 2012.

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/m² 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.

New affected source means an affected hard chromium electroplating tank, decorative chromium electroplating tank, or chromium anodizing tank, the construction or reconstruction of which commenced after February 8, 2012.

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.

Perfluorooctane sulfonic acid (PFOS)-based fume suppressant means a fume suppressant that contains 1 percent or greater PFOS by weight.
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 commercially available chemical fume suppressant that materially 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. AMRsys = 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 = the total inlet area for all ducts associated with affected sources in meters squared.
6. IDA_{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 or 306A testing specified in appendix A of this part in dscm/min.
§63.342 Standards.

(a)(1) At all times, each owner or operator must operate and maintain any affected source subject to the requirements of this subpart, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such 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 operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(2) Each owner or operator of an affected source subject to the provisions of this subpart shall comply with these requirements in this section 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. In response to an action to enforce the standards set forth in this subpart, the owner or operator may assert a defense to a claim for civil penalties for violations of such standards that are caused by a malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(i) To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements of paragraph (b)(1)(ii) of this section, and must prove by a preponderance of evidence that:

(A) The violation was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal and usual manner; and could not have been prevented through careful planning, proper design or better operation and maintenance practices; and did not stem from any activity or event that could have been foreseen and avoided, or planned for; and was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(B) Repairs were made as expeditiously as possible when exceeded violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(C) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(D) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(E) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

(F) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(G) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(H) At all times, the affected sources were operated in a manner consistent with good practices for minimizing emissions; and
(i) A written root cause analysis was prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using the best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(ii) Report. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (i) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmation defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

(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 0.011 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air (4.8 × 10⁻⁶ grains per dry standard cubic foot (gr/dscf)) for all open surface hard chromium electroplating tanks that are existing affected sources and are located at large hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6 × 10⁻⁶ gr/dscf) for all open surface hard chromium electroplating tanks that are existing affected sources and are located at small, hard chromium electroplating facilities; or

(iii) If a chemical fume suppressant containing a wetting agent is used, not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 40 dynes per centimeter (dynes/cm) (2.8 × 10⁻³ pound-force per foot (lbf/ft)), as measured by a stalagmometer, or 33 dynes/cm (2.3 × 10⁻³ lbf/ft), as measured by a tensiometer at any time during tank operation; or

(iv) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.006 mg/dscm of ventilation air (2.6 × 10⁻⁶ gr/dscf) for all open surface hard chromium electroplating tanks that are new affected sources; or

(v) After September 21, 2015, the owner or operator of an affected open surface hard chromium electroplating tank shall not add PFOS-based fume suppressants to any affected open surface hard chromium electroplating tank.
(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 0.011 mg/dscm of ventilation air ($4.8 \times 10^{-6}$ gr/dscf) for all enclosed hard chromium electroplating tanks that are existing affected sources and are located at large hard chromium electroplating facilities; or

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

(iii) If a chemical fume suppressant containing a wetting agent is used, not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 40 dynes/cm ($2.8 \times 10^{-3}$ lbf/ft), as measured by a stalagmometer, or 33 dynes/cm ($2.3 \times 10^{-3}$ lbf/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 existing affected sources and are located at large 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.

(vi) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.006 mg/dscm of ventilation air ($2.6 \times 10^{-6}$ gr/dscf) for all enclosed hard chromium electroplating tanks that are new affected sources; or

(vii) 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)(iii) if the enclosed hard chromium electroplating tank is a new affected source.

(viii) After September 21, 2015, the owner or operator of an affected enclosed hard chromium electroplating tank shall not add PFOS-based fume suppressants to any affected enclosed hard chromium electroplating tank.

(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 0.007 mg/dscm \( (3.1 \times 10^{-6} \text{ gr/dscf}) \) for all existing decorative chromium electroplating tanks using a chromic acid bath and all existing chromium anodizing tanks; or

(2) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.006 mg/dscm \( (2.6 \times 10^{-6} \text{ gr/dscf}) \) for all new or reconstructed decorative chromium electroplating tanks using a chromic acid bath and all new or reconstructed chromium anodizing tanks; or

(3) If a chemical fume suppressant containing a wetting agent is used, not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 40 dynes/cm \( (2.8 \times 10^{-3} \text{ lbf/ft}) \), as measured by a stalagmometer or 33 dynes/cm \( (2.3 \times 10^{-3} \text{ lbf/ft}) \), as measured by a tensiometer at any time during tank operation, for all existing, new, or reconstructed decorative chromium electroplating tanks using a chromic acid bath and all existing, new, or reconstructed chromium anodizing tanks; or

(4) After September 21, 2015, the owner or operator of an affected decorative chromium electroplating tank or an affected chromium anodizing tank shall not add PFOS-based fume suppressants to any affected decorative chromium electroplating tank or chromium anodizing 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 as a package.

(2) After September 21, 2015, the owner or operator of an affected decorative chromium electroplating tank using a trivalent chromium bath shall not add PFOS-based fume suppressants to any affected decorative chromium electroplating tank.

(3) 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.

(4) Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that had been using a trivalent chromium bath that incorporated 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.

(F) The plan shall include housekeeping procedures, as specified in Table 2 of this section.

(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

<table>
<thead>
<tr>
<th>Control technique</th>
<th>Operation and maintenance practices</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite mesh-pad (CMP) system</td>
<td>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</td>
<td>1. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>2. Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist</td>
<td>2. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>3. Visually inspect ductwork from tank to the control device to ensure there are no leaks</td>
<td>3. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>4. Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations</td>
<td>4. Per manufacturer.</td>
</tr>
<tr>
<td>Packed-bed scrubber (PSB)</td>
<td>1. Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device</td>
<td>1. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>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</td>
<td>2. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>3. Same as number 3 above</td>
<td>3. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>4. Add fresh makeup water to the top of the packed beda,b</td>
<td>4. Whenever makeup is added.</td>
</tr>
<tr>
<td>PBS/CMP system</td>
<td>1. Same as for CMP system</td>
<td>1. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>2. Same as for CMP system</td>
<td>2. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>3. Same as for CMP system</td>
<td>3. 1/quarter.</td>
</tr>
<tr>
<td></td>
<td>4. Same as for CMP system</td>
<td>4. Per manufacturer.</td>
</tr>
<tr>
<td>Fiber-bed mist eliminatorc</td>
<td>1. Visually inspect fiber-bed unit and prefiltering device to ensure there is proper drainage, no chronic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices</td>
<td>1. 1/quarter.</td>
</tr>
</tbody>
</table>
### Control technique

<table>
<thead>
<tr>
<th>Operation and maintenance practices</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks</td>
<td>2. 1/quarter.</td>
</tr>
<tr>
<td>3. Perform washdown of fiber elements in accordance with manufacturers recommendations</td>
<td>3. Per manufacturer.</td>
</tr>
</tbody>
</table>

### 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 |

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\(^a\) 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.

### Table 2 to §63.342—Housekeeping Practices

<table>
<thead>
<tr>
<th>For</th>
<th>You must:</th>
<th>At this minimum frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Any substance used in an affected chromium electroplating or chromium anodizing tank that contains hexavalent chromium</td>
<td>(a) Store the substance in a closed container in an enclosed storage area or building; AND (b) Use a closed container when transporting the substance from the enclosed storage area</td>
<td>At all times, except when transferring the substance to and from the container. Whenever transporting substance, except when transferring the substance to and from the container.</td>
</tr>
<tr>
<td>2. Each affected tank, to minimize spills of bath solution that result from dragout. Note: this measure does not require the return of contaminated bath solution to the tank. This requirement applies only as the parts are removed from the tank. Once away from the tank area, any spilled solution must be handled in accordance with Item 4 of these housekeeping measures</td>
<td>(a) Install drip trays that collect and return to the tank any bath solution that drips or drains from parts as the parts are removed from the tank; OR (b) Contain and return to the tank any bath solution that drains or drips from parts as the parts are removed from the tank; OR (c) Collect and treat in an onsite wastewater treatment plant any bath solution that drains or drips from parts as the parts are removed from the tank</td>
<td>Prior to operating the tank. Whenever removing parts from an affected tank. Whenever removing parts from an affected tank.</td>
</tr>
</tbody>
</table>
For | You must: | At this minimum frequency |
--- | --- | --- |
3. Each spraying operation for removing excess chromic acid from parts removed from, and occurring over, an affected tank | Install a splash guard to minimize overspray during spraying operations and to ensure that any hexavalent chromium laden liquid captured by the splash guard is returned to the affected chromium electroplating or anodizing tank | Prior to any such spraying operation. |
4. Each operation that involves the handling or use of any substance used in an affected chromium electroplating or chromium anodizing tank that contains hexavalent chromium | Begin clean up, or otherwise contain, all spills of the substance. Note: substances that fall or flow into drip trays, pans, sumps, or other containment areas are not considered spills | Within 1 hour of the spill. |
5. Surfaces within the enclosed storage area, open floor area, walkways around affected tanks contaminated with hexavalent chromium from an affected chromium electroplating or chromium anodizing tank | (a) Clean the surfaces using one or more of the following methods: HEPA vacuuming; Hand-wiping with a damp cloth; Wet mopping; Hose down or rinse with potable water that is collected in a wastewater collection system; Other cleaning method approved by the permitting authority; OR (b) Apply a non-toxic chemical dust suppressant to the surfaces | At least once every 7 days if one or more chromium electroplating or chromium anodizing tanks were used, or at least after every 40 hours of operating time of one or more affection chromium electroplating or chromium anodizing tank, whichever is later. According to manufacturer's recommendations. |
6. All buffing, grinding, or polishing operations that are located in the same room as chromium electroplating or chromium anodizing operations | Separate the operation from any affected electroplating or anodizing operation by installing a physical barrier; the barrier may take the form of plastic strip curtains | Prior to beginning the buffing, grinding, or polishing operation. |
7. All chromium or chromium-containing wastes generated from housekeeping activities | Store, dispose, recover, or recycle the wastes using practices that do not lead to fugitive dust and in accordance with hazardous waste requirements | At all times. |


§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 no later than September 19, 2014.

(2) The owner or operator of a new or reconstructed affected source that has an initial startup after September 19, 2012, shall comply immediately upon startup of the source.

(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 February 8, 2012, 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.

(8) After March 19, 2013, the owner or operator of an affected source that is subject to the standards in paragraphs §63.342(c) or (d) shall implement the housekeeping procedures specified in Table 2 of §63.342.

(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, 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. As an alternative to the daily monitoring, the owner or operator of an
affected source may install a continuous pressure monitoring system.

(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, 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, 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, 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 40 dynes/cm, as measured by a stalagmometer, or 33 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)(1) 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, 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 40 dynes/cm, as measured by a stalagmometer, or 33 dynes/cm, as measured by a tensiometer, 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 surface tension shall be monitored according to the following schedule:

(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, 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:
(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.


§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. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (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) 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;

(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);

(v) The performance test was conducted after January 25, 1995;

(vi) As of September 19, 2012 the source was using the same emissions controls that were used during the compliance test;

(vii) As of September 19, 2012, the source was operating under conditions that are representative of the conditions under which the source was operating during the compliance test; and

(viii) Based on approval from the permitting authority.

(2) [Reserved]

(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 must demonstrate compliance with the emission limits of §63.342 by measuring the total chromium.

(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).

(5) The South Coast Air Quality Management District (SCAQMD) Method 205.1 (which is available by contacting the South Coast AQMD, 21865 Copley Dr, Diamond Bar, CA 91765) may be used to determine the total chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks.

(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 as possible 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 ($\Delta p$) values for the velocity points and record. Determine the square root of the individual velocity point $\Delta p$ 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 $\Delta p$ 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;

(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 or 306A testing and calculate an outlet mass emission rate.
(iv) Determine the total ventilation rate from the affected sources (VRinlet) by using equation 1:

where VRtot 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 or 306A testing; IDAi is the total inlet area for all ducts associated with affected sources; \( \sum IA_{\text{total}} \) is the sum of all inlet duct areas from both affected and nonaffected sources; and VRinlet is the total ventilation rate from all inlet ducts associated with affected sources.

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

where \( \sum VR_{\text{inlet}} \) 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 (AMRsys) calculated from equation 2 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 or 306A 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 (VRinlet,a) using equation 3:

where VRtot 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 or 306A testing; IDAi,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; \( \sum IA_{\text{total}} \) is the sum of all duct areas from both affected and nonaffected sources; and VRinlet,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:

\[
\begin{align*}
VR_{hc1} \times EL_{hc1} \times 60 \text{ minutes/hour} &= AMR_{hc1} \quad (4) \\
VR_{hc2} \times EL_{hc2} \times 60 \text{ minutes/hour} &= AMR_{hc2} \quad (5) \\
VR_{dc} \times EL_{dc} \times 60 \text{ minutes/hour} &= AMR_{dc} \quad (6) \\
VR_{ca} \times EL_{ca} \times 60 \text{ minutes/hour} &= AMR_{ca} \quad (7)
\end{align*}
\]

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 of the system (AMR<sub>sys</sub>) in milligrams of total chromium per hour (mg/hr) using equation 8, including each type of affected source as appropriate:

\[
\text{AMR}_{\text{nc1}} + \text{AMR}_{\text{nc2}} + \text{AMR}_{\text{de}} + \text{AMR}_{\text{cs}} = \text{AMR}_{\text{sys}} \quad (8)
\]

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 or 306A 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 existing affected source and is located at a large 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:

\[
\text{AMR}_{\text{nc1}} + \text{AMR}_{\text{nc2}} + \text{AMR}_{\text{de}} + \text{AMR}_{\text{cs}} = \text{AMR}_{\text{sys}} \quad (9)
\]

(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:

\[
\text{AMR}_{\text{nc1}} + \text{AMR}_{\text{nc2}} + \text{AMR}_{\text{de}} + \text{AMR}_{\text{cs}} = \text{AMR}_{\text{sys}} \quad (10)
\]

(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.

(iii)(A) The owner or operator of an enclosed hard chromium electroplating tank that is a new source who chooses to meet the mass emission rate standard in §63.342(c)(2)(vii) 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 11:
(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from testing using Method 306 or 306A of appendix A to part 63 is less than or equal to the maximum allowable mass emission rate calculated from equation 11.


§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, except routine housekeeping practices;

(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 to minimize emissions in accordance with §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;

(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 and records of the fume suppressant manufacturer and product name;

(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.
(3)(i) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart, you must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ltn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

(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 number, duration, and a brief description for each type of malfunction which occurred during the reporting
period and which caused or may have caused any applicable emission limitation to be exceeded. The report must
also include a description of actions taken by an owner or operator during a malfunction of an affected source to
minimize emissions in accordance with §63.342(a)(1), including actions taken to correct a malfunction.

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

(xiv) 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 either of the following conditions is 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; or

(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.


§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

<table>
<thead>
<tr>
<th>General provisions reference</th>
<th>Applies to subpart N</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.1(a)(1)</td>
<td>Yes</td>
<td>Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.</td>
</tr>
<tr>
<td>63.1(a)(2)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.1(a)(3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.1(a)(4)</td>
<td>Yes</td>
<td>Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.</td>
</tr>
<tr>
<td>63.1(a)(5)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.1(a)(6)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.1(a)(7)-(9)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.1(a)(10)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.1(a)(11)</td>
<td>Yes</td>
<td>§63.347(a) of subpart N also allows report submissions via fax and on electronic media.</td>
</tr>
<tr>
<td>63.1(a)(12)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.1(b)(1)</td>
<td>No</td>
<td>§63.340 of subpart N specifies applicability.</td>
</tr>
<tr>
<td>63.1(b)(2)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.1(b)(3)</td>
<td>No</td>
<td>This provision in subpart A is being deleted. Also, all affected area and major sources are subject to subpart N; there are no exemptions.</td>
</tr>
<tr>
<td>63.1(c)(1)</td>
<td>Yes</td>
<td>Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.</td>
</tr>
<tr>
<td>63.1(c)(2)</td>
<td>Yes</td>
<td>§63.340(e) of Subpart N exempts area sources from the obligation to obtain Title V operating permits.</td>
</tr>
<tr>
<td>63.1(c)(3)-(4)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.1(c)(5)</td>
<td>No</td>
<td>Subpart N clarifies that an area source that becomes a major source is subject to the requirements for major sources.</td>
</tr>
<tr>
<td>63.1(e)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.2</td>
<td>Yes</td>
<td>Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.</td>
</tr>
<tr>
<td>63.3</td>
<td>Yes</td>
<td>Other units used in subpart N are defined in that subpart.</td>
</tr>
<tr>
<td>63.4(a)(1)-(2)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>General provisions reference</td>
<td>Applies to subpart N</td>
<td>Comment</td>
</tr>
<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>63.4(a)(3)-(5)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.4(b)-(c)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.5(a)</td>
<td>Yes</td>
<td>Except replace the term “source” and “stationary source” in §63.5(a) (1) and (2) of subpart A with “affected sources.”</td>
</tr>
<tr>
<td>63.5(b)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.5(b)(2)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.5(b)(3)</td>
<td>Yes</td>
<td>Applies only to major affected sources.</td>
</tr>
<tr>
<td>63.5(b)(4)</td>
<td>No</td>
<td>Subpart N (§63.345) specifies requirements for the notification of construction or reconstruction for affected sources that are not major.</td>
</tr>
<tr>
<td>63.5(b)(5)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.5(b)(6)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.5(c)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.5(d)(1)(i)</td>
<td>No</td>
<td>§63.345(c)(5) of subpart N specifies when the application or notification shall be submitted.</td>
</tr>
<tr>
<td>63.5(d)(1)(ii)</td>
<td>Yes</td>
<td>Applies to major affected sources that are new or reconstructed.</td>
</tr>
<tr>
<td>63.5(d)(1)(iii)</td>
<td>Yes</td>
<td>Except information should be submitted with the Notification of Compliance Status required by §63.347(e) of subpart N.</td>
</tr>
<tr>
<td>63.5(d)(2)</td>
<td>Yes</td>
<td>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).</td>
</tr>
<tr>
<td>63.5(d)(3)-(4)</td>
<td>Yes</td>
<td>Applies to major affected sources that are new or reconstructed.</td>
</tr>
<tr>
<td>63.5(e)</td>
<td>Yes</td>
<td>Applies to major affected sources that are new or reconstructed.</td>
</tr>
<tr>
<td>63.5(f)(1)</td>
<td>Yes</td>
<td>Except replace “source” in §63.5(f)(1) of subpart A with “affected source.”</td>
</tr>
<tr>
<td>63.5(f)(2)</td>
<td>No</td>
<td>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.</td>
</tr>
<tr>
<td>63.6(a)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(b)(1)-(2)</td>
<td>Yes</td>
<td>Except replace “source” in §63.6(b)(1)-(2) of part A with “affected source.”</td>
</tr>
<tr>
<td>63.6(b)(3)-(4)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(b)(5)</td>
<td>Yes</td>
<td>Except replace “source” in §63.6(b)(5) of subpart A with “affected source.”</td>
</tr>
<tr>
<td>63.6(b)(7)</td>
<td>No</td>
<td>Provisions for new area sources that become major sources are contained in §63.343(a)(4) of subpart N.</td>
</tr>
<tr>
<td>63.6(c)(1)-(2)</td>
<td>Yes</td>
<td>Except replace “source” in §63.6(c)(1)-(2) of subpart A with “affected source.”</td>
</tr>
<tr>
<td>63.6(c)(3)-(4)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.6(c)(5)</td>
<td>No</td>
<td>Compliance provisions for existing area sources that become major sources are contained in §63.343(a)(3) of subpart N.</td>
</tr>
<tr>
<td>63.6(d)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>General provisions reference</td>
<td>Applies to subpart N</td>
<td>Comment</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>63.6(e)(1)-(3)</td>
<td>No</td>
<td>§63.342(f) of subpart N contains work practice standards (operation and maintenance requirements) that override these provisions.</td>
</tr>
<tr>
<td>63.6(f)(1)</td>
<td>No</td>
<td>§63.342(b) of subpart N specifies when the standards apply.</td>
</tr>
<tr>
<td>63.6(f)(2)(i)-(ii)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(f)(2)(iii)</td>
<td>No</td>
<td>§63.344(b) of subpart N specifies instances in which previous performance test results for existing sources are acceptable.</td>
</tr>
<tr>
<td>63.6(f)(2)(iv)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(f)(2)(v)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(f)(3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(g)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(h)(1)</td>
<td>No</td>
<td>SSM Exception</td>
</tr>
<tr>
<td>63.6(h)(2)</td>
<td>No</td>
<td>Subpart N does not contain any opacity or visible emission standards.</td>
</tr>
<tr>
<td>63.6(i)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(2)</td>
<td>Yes</td>
<td>Except replace &quot;source&quot; in §63.6(i)(2)(i) and (ii) of subpart A with &quot;affected source.&quot;</td>
</tr>
<tr>
<td>63.6(i)(3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(4)(i)</td>
<td>No</td>
<td>§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.</td>
</tr>
<tr>
<td>63.6(i)(4)(ii)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(4)(iii)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(4)(iv)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(4)(v)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(5)</td>
<td>Yes</td>
<td>This paragraph only references &quot;paragraph (i)(4) of this section&quot; for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.</td>
</tr>
<tr>
<td>63.6(i)(6)(i)</td>
<td>Yes</td>
<td>This paragraph only references &quot;paragraphs (i)(4) through (i)(6) of this section&quot; for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.</td>
</tr>
<tr>
<td>63.6(i)(6)(ii)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(7)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(8)</td>
<td>Yes</td>
<td>This paragraph only references &quot;paragraphs (i)(4) through (i)(6) of this section&quot; for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.</td>
</tr>
<tr>
<td>63.6(i)(9)</td>
<td>Yes</td>
<td>This paragraph only references &quot;paragraphs (i)(4) through (i)(6) of this section&quot; and &quot;paragraphs (i)(4) and (i)(5) of this section&quot; for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.</td>
</tr>
<tr>
<td>63.6(i)(10)(i)-(iv)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(10)(v)(A)</td>
<td>Yes</td>
<td>This paragraph only references &quot;paragraph (i)(4)&quot; for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.</td>
</tr>
<tr>
<td>63.6(i)(10)(v)(B)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(11)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>General provisions reference</td>
<td>Applies to subpart N</td>
<td>Comment</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>---------</td>
</tr>
<tr>
<td>63.6(i)(12)(i)</td>
<td>Yes</td>
<td>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.</td>
</tr>
<tr>
<td>63.6(i)(12)(ii)-(iii)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(13)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(14)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(i)(15)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.6(i)(16)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.6(j)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(a)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(a)(2)(i)-(viii)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.7(a)(2)(ix)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(a)(3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(a)(4)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(b)(1)</td>
<td>No</td>
<td>§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.</td>
</tr>
<tr>
<td>63.7(b)(2)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(c)</td>
<td>No</td>
<td>§63.344(a) of subpart N specifies what the test plan should contain, but does not require test plan approval or performance audit samples.</td>
</tr>
<tr>
<td>63.7(d)</td>
<td>Yes</td>
<td>Except replace “source” in the first sentence of §63.7(d) of subpart A with “affected source.”</td>
</tr>
<tr>
<td>63.7(e)(1)</td>
<td>No</td>
<td>See §63.344(a). Any cross reference to §63.7(e)(1) in any other general provision incorporated by reference shall be treated as a cross-reference to §63.344(a).</td>
</tr>
<tr>
<td>63.7(e)(2)-(4)</td>
<td>Yes</td>
<td>Subpart N also contains test methods specific to affected sources covered by that subpart.</td>
</tr>
<tr>
<td>63.7(f)</td>
<td>Yes</td>
<td>§63.344(c)(2) of subpart N identifies CARB Method 425 as acceptable under certain conditions.</td>
</tr>
<tr>
<td>63.7(g)(1)</td>
<td>No</td>
<td>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)].</td>
</tr>
<tr>
<td>63.7(g)(2)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.7(g)(3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(h)(1)-(2)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(h)(3)(i)</td>
<td>Yes</td>
<td>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.</td>
</tr>
<tr>
<td>63.7(h)(3)(ii)-(iii)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.7(h)(4)-(5)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.8(a)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>General provisions reference</td>
<td>Applies to subpart N</td>
<td>Comment</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>63.8(a)(2)</td>
<td>No</td>
<td>Work practice standards are contained in §63.342(f) of subpart N.</td>
</tr>
<tr>
<td>63.8(a)(3)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.8(a)(4)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>63.8(b)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.8(b)(2)</td>
<td>No</td>
<td>§63.344(d) of subpart N specifies the monitoring location when there are multiple sources.</td>
</tr>
<tr>
<td>63.9(b)(3)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.8(c)(1)(i)</td>
<td>No</td>
<td>Subpart N requires proper maintenance of monitoring devices expected to be used by sources subject to subpart N.</td>
</tr>
<tr>
<td>63.8(c)(1)(ii)</td>
<td>No</td>
<td>§63.342(f)(3)(iv) of subpart N specifies reporting when the O&amp;M plan is not followed.</td>
</tr>
<tr>
<td>63.8(c)(1)(iii)</td>
<td>No</td>
<td>§63.343(f)(2) identifies the criteria for whether O&amp;M procedures are acceptable.</td>
</tr>
<tr>
<td>63.8(c)(2)-(3)</td>
<td>No</td>
<td>§63.344(d)(2) requires appropriate use of monitoring devices.</td>
</tr>
<tr>
<td>63.8(c)(4)-(7)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>63.8(d)</td>
<td>No</td>
<td>Maintenance of monitoring devices is required by §§63.342(f) and 63.344(d)(2) of subpart N.</td>
</tr>
<tr>
<td>63.8(e)</td>
<td>No</td>
<td>There are no performance evaluation procedures for the monitoring devices expected to be used to comply with subpart N.</td>
</tr>
<tr>
<td>63.8(f)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.8(f)(2)</td>
<td>No</td>
<td>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.</td>
</tr>
<tr>
<td>63.8(f)(3)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.8(f)(4)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.8(f)(5)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.8(f)(6)</td>
<td>No</td>
<td>Subpart N does not require the use of CEM's.</td>
</tr>
<tr>
<td>63.8(g)</td>
<td>No</td>
<td>Monitoring data does not need to be reduced for reporting purposes because subpart N requires measurement once/day.</td>
</tr>
<tr>
<td>63.9(a)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.9(b)(1)(i)-ii</td>
<td>No</td>
<td>§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.</td>
</tr>
<tr>
<td>63.9(b)(1)(iii)</td>
<td>No</td>
<td>§63.347(c)(2) of subpart N specifies initial notification requirements for new or reconstructed affected sources.</td>
</tr>
<tr>
<td>63.9(b)(2)</td>
<td>No</td>
<td>§63.347(c)(1) of subpart N specifies the information to be contained in the initial notification.</td>
</tr>
<tr>
<td>63.9(b)(3)</td>
<td>No</td>
<td>§63.347(c)(2) of subpart N specifies notification requirements for new or reconstructed sources that are not major affected sources.</td>
</tr>
<tr>
<td>63.9(b)(4)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>63.9(b)(5)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>General provisions reference</td>
<td>Applies to subpart N</td>
<td>Comment</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>---------</td>
</tr>
<tr>
<td>63.9(c)</td>
<td>Yes</td>
<td>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).</td>
</tr>
<tr>
<td>63.9(d)</td>
<td>Yes</td>
<td>This paragraph only references “the notification dates established in paragraph (g) of this section.” But, §63.347 of subpart N also contains notification dates.</td>
</tr>
<tr>
<td>63.9(e)</td>
<td>No</td>
<td>Notification of performance test is required by §63.347(d) of subpart N.</td>
</tr>
<tr>
<td>63.9(f)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>63.9(g)</td>
<td>No</td>
<td>Subpart N does not require a performance evaluation or relative accuracy test for monitoring devices.</td>
</tr>
<tr>
<td>63.9(h)(1)-(3)</td>
<td>No</td>
<td>§63.347(e) of subpart N specifies information to be contained in the notification of compliance status and the timeframe for submitting this information.</td>
</tr>
<tr>
<td>63.9(h)(4)</td>
<td>No</td>
<td>[Reserved]</td>
</tr>
<tr>
<td>63.9(h)(5)</td>
<td>No</td>
<td>Similar language has been incorporated into §63.347(e)(2)(iii) of subpart N.</td>
</tr>
<tr>
<td>63.9(h)(6)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.9(i)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.9(j)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.10(a)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.10(b)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.10(b)(2)</td>
<td>No</td>
<td>§63.346(b) of subpart N specifies the records that must be maintained.</td>
</tr>
<tr>
<td>63.10(b)(3)</td>
<td>No</td>
<td>Subpart N applies to major and area sources.</td>
</tr>
<tr>
<td>63.10(c)</td>
<td>No</td>
<td>Applicable requirements of §63.10(c) have been incorporated into §63.346(b) of subpart N.</td>
</tr>
<tr>
<td>63.10(d)(1)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.10(d)(2)</td>
<td>No</td>
<td>§63.347(f) of subpart N specifies the timeframe for reporting performance test results.</td>
</tr>
<tr>
<td>63.10(d)(3)</td>
<td>No</td>
<td>Subpart N does not contain opacity or visible emissions standards.</td>
</tr>
<tr>
<td>63.10(d)(4)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.10(d)(5)</td>
<td>No</td>
<td>§63.342(f)(3)(iv) and §63.347(g)(3) of subpart N specify reporting associated with malfunctions.</td>
</tr>
<tr>
<td>63.10(e)</td>
<td>No</td>
<td>§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).</td>
</tr>
<tr>
<td>63.10(f)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>63.11</td>
<td>No</td>
<td>Flares will not be used to comply with the emission limits.</td>
</tr>
<tr>
<td>63.12-63.15</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

EDITORIAL NOTE: At 77 FR 58248, Sept. 19, 2012, table 1 to subpart N of part 63 was amended by revising the entry for 63.6 (b)(6); however, because of the inaccurate amendatory language, the amendment could not be incorporated.
Electronic Code of Federal Regulations

Title 40: Protection of Environment

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

Subpart WWWWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

Source: 73 FR 37741, July 1, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11504 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.

(1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.

(i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).

(ii) Electroless or non-electrolytic plating.

(iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

(iv) Dry mechanical polishing of finished metals and formed products after plating or thermal spraying.

(v) Electroforming.

(vi) Electropolishing.

(2) A plating or polishing facility is an area source of HAP emissions, where an area source is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.

(3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in § 63.11511, “What definitions apply to this subpart?” With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.

(b) [Reserved]

[73 FR 37741, July 1, 2008, as amended at 76 FR 57919, Sept. 19, 2011]
§ 63.11505  What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in § 63.11511, “What definitions apply to this subpart?”

(1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in § 63.11511, “What definitions apply to this subpart?”, and is used for non-chromium electroplating; electroforming; electropolishing; electroleess plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

(2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in § 63.11511, “What definitions apply to this subpart?”

(3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in § 63.11511, “What definitions apply to this subpart?”

(b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.

(c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.

(d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.

(1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

(2) Research and development process units, as defined in § 63.11511, “What definitions apply to this subpart?”

(3) Process units that are used strictly for educational purposes.

(4) Plating, polishing, coating, or thermal spraying conducted to repair surfaces or equipment.

(5) Dry mechanical polishing conducted to restore the original finish to a surface.

(6) Any plating or polishing process that uses process materials that contain cadmium, chromium, lead, or nickel (as the metal) in amounts less than 0.1 percent by weight, or that contain manganese in amounts less than 1.0 percent by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing process may include information reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents “as used” to plate or to polish.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, “Title V,” provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 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.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57919, Sept. 19, 2011]

§ 63.11506  What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.
(b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.

(c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

Standards and Compliance Requirements

§ 63.11507 What are my standards and management practices?

(a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in § 63.11511, “What definitions apply to this subpart?”) that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must use a wetting agent/fume suppressant in the bath of the affected tank, as defined in § 63.11511, “What definitions apply to this subpart?” and according to paragraphs (a)(1)(i) through (iii) of this section.

(i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.

(ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that of the original make-up of the bath.

(iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.

(2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.

(i) For batch electrolytic process tanks, as defined in § 63.11511, “What definitions apply to this subpart?”, you must use a tank cover, as defined in § 63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

(ii) For continuous electrolytic process tanks, as defined in § 63.11511, “What definitions apply to this subpart?”, you must cover at least 75 percent of the surface of the tank, as defined in § 63.11511, whenever the electrolytic process tank is in operation.

(b) If you own or operate an affected new or existing “flash” or short-term electroplating tank, as defined in § 63.11511, “What definitions apply to this subpart?”, that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.
(1) You must limit short-term or “flash” electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(2) You must use a tank cover, as defined in § 63.11511, “What definitions apply to this subpart?”, for at least 95 percent of the plating time.

(c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:

(1) You must measure and record the pH of the bath upon startup of the bath, as defined in § 63.11511, “What definitions apply to this subpart?” No additional pH measurements are required.

(2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.

(e) If you own or operate an affected new or existing dry mechanical polishing machine that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.

(1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.

(1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, cartridge, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

(2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

(3) For temporary thermal spraying operations, as defined in § 63.11511 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.

(ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.
(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

§ 63.11508  What are my compliance requirements?

(a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with § 63.11509(b) of “What are my notification, reporting, and recordkeeping requirements?”

(b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.

(c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?”, and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.

(i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.
(ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?” and you use a control system, as defined in § 63.11511, “What definitions apply to this subpart?” to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.

(i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.

(3) If you own or operate an affected batch electrolytic process tank, as defined in § 63.11511, “What definitions apply to this subpart?” that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in § 63.11507(a), “What are my standards and management practices?” and you use a tank cover, as defined in § 63.11511, to comply with § 11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(iii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(4) If you own or operate an affected continuous electrolytic process tank, as defined in § 63.11511, “What definitions apply to this subpart?” that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?” and you cover the tank surface to comply with § 11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.

(i) You must cover at least 75 percent of the surface area of the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.
(iii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

(i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.

(ii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.

(iii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in § 63.11507(d), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.

(i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at startup, as defined in § 63.11511, according to the requirements of § 63.11507(d)(1).

(ii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11490(g), “What are my standards and management practices?”, as practicable.

(8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(e), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.
(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(1), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, or a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(2), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.

(i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(3), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.

(i) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.

(1) You must always operate and maintain your affected source, including air pollution control equipment.

(2) You must prepare an annual compliance certification according to the requirements specified in § 63.11509(c), “Notification, Reporting, and Recordkeeping,” and keep it in a readily-accessible location for inspector review.

(3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards
and management practices?”, and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.

(i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.

(ii) For tanks where the wetting agent/fume suppressant is a separate ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.

(A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank; or in proportion such that the bath is brought back to the original make-up of the tank.

(B) You must record each addition of wetting agent/fume suppressant to the tank bath.

(iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?”, and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to § 63.11507(e); or an affected thermal spraying operation that is subject to § 63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.

(i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.

(ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.

(iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

(v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.

(i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(ii) You must record the times that the affected tank is operated each day.

(iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of § 63.11507(a), “What are my standards and management
practices?” or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), and you comply with § 11507(a), (b) or (c) of this section by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

(i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.

(iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.

(i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.

(ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.

(8) If you own or operate an affected tank or other operation that is subject to the management practices specified in § 63.11507(g), “What are my standards and management practices?”, you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

(i) You must implement the applicable management practices during all times that the affected tank or process is in operation.

(ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

§ 63.11509 What are my notification, reporting, and recordkeeping requirements?

(a) If you own or operate an affected source, as defined in § 63.11505(a), “What parts of my plant does this subpart cover?”, you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.

(1) The Initial Notification must include the information specified in § 63.9(b)(2)(i) through (iv) of the General Provisions of this part.

(2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source.

(3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.

(4) If you startup your new affected source after July 1, 2008, you must submit an Initial Notification when you become subject to this subpart.

(b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) through (3) of this section.
(1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in § 63.11506, “What are my compliance dates?”

(2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.

(i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.

(ii) Methods used to comply with the applicable management practices and equipment standards.

(iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.

(iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

(3) If a facility makes a change to any items in (b)(2)(i), iii, and (iv) of this section that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change.

(c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in § 63.11507(a)(1), “What are my standards and management practices?”, you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer’s specifications and instructions.

(2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer’s specifications and instructions.

(i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in § 63.11507(a), “What are my standards and management practices?”, and you use a control system to comply with this subpart;

(ii) Dry mechanical polishing operation that is subject to § 63.11507(e); or

(iii) Permanent thermal spraying operation that is subject to § 63.11507(f)(1) or (2).

(3) If you own or operate an affected batch electrolytic process tank that is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(4) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements of § 63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of § 63.11507(a), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.
(6) If you own or operate an affected tank or other affected plating and polishing operation that is subject to the management practices specified in § 63.11507(g), “What are my standards and management practices?” you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

(7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

(d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.

(e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.

(1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.

(2) The records specified in § 63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.

(3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in § 63.11508(d), “What are my compliance requirements?”

(f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

Other Requirements and Information

§ 63.11510 What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

§ 63.11511 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

**Batch electrolytic process tank** means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

**Bath** means the liquid contents of a tank, as defined in this section, which is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

**Bench-scale** means any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor.

**Capture system** means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system.
A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

**Cartridge filter** means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

**Composite mesh pad** means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

**Continuous electrolytic process tank** means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

**Control device** means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

**Control system** means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

**Conversion coatings** are coatings that form a hard metal finish on an object when the object is submerged in a tank bath or solution that contains the conversion coatings. Conversion coatings for the purposes of this rule include coatings composed of chromium, as well as the other plating and polishing metal HAP, where no electrical current is used.

**Cyanide plating** means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH greater than or equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

**Deviation** means any instance in which an affected source or an owner or operator of such an affected source:

1. Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;

2. Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or

3. Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

**Dry mechanical polishing** means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating or thermal spraying with any of the plating and polishing metal HAP, as
defined in this section, using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

**Electroforming** means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

**Electroless plating** means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

**Electroplating processes** means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

**Electroplating** means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

**Electropolishing** means an electrolytic process performed in a tank after plating that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing. For the purposes of this subpart, electropolishing does not include bench-scale operations.

**Fabric filter** means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

**Filters**, for the purposes of this part, include cartridge, fabric, or HEPA filters, as defined in this section.

**Flash electroplating** means an electrolytic process performed in a tank that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

**General Provisions of this part (40 CFR part 63, subpart A)** means the section of the Code of Federal Regulations (CFR) that addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**HAP** means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called “air toxics.” The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

**High efficiency particulate air (HEPA) filter** means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

**Maintenance** is any process at a plating and polishing facility that is performed to keep the process equipment or the facility operating properly and is not performed on items to be sold as products.

**Major facility for HAP** is any facility that emits greater than 10 tpy of any HAP, or that emits a combined total of all HAP of over 25 tpy, where the HAP used to determine the total facility emissions are not restricted to only plating and polishing metal HAP or from only plating and polishing operations.
Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

Metal coating operation means any process performed either in a tank that contains liquids or as part of a thermal spraying operation, that applies one or more plating and polishing metal HAP, as defined in this section, to the surface of parts and products used in manufacturing. These processes include but are not limited to: non-chromium electroplating; electroforming; electropolishing; non-electrolytic metal coating processes, such as chromate conversion coating, electrolless nickel plating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal or flame spraying.

Metal HAP content of material used in plating and polishing is the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution, in the case of plating, metal coating, or electropolishing; or the HAP content of the metal coating being applied in the case of thermal spraying. Safety data sheet (SDS) information may be used in lieu of testing or engineering estimates but is not required to be used.

New source means any affected source for which you commenced construction or reconstruction after March 14, 2008.

Non-cyanide electrolytic plating and electropolishing processes means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

Non-electrolytic plating means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, electrolless nickel plating, sodium dichromate sealing, and manganese phosphate coating.

Packed-bed scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Plating and polishing facility means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: electroplating processes other than chromium electroplating (i.e., non-chromium electroplating); electrolless plating; other non-electrolytic metal coating processes performed in a tank, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating or thermal spraying. Plating is performed in a tank or thermally sprayed so that a metal coating is irreversibly applied to an object. Plating and polishing does not include any bench-scale processes.

Plating and polishing metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and does not contain manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: electroplating processes other than chromium electroplating (i.e., non-chromium electroplating) performed in a tank; electrolless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to clean, rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include any bench-scale operations.
PM means solid or particulate matter that is emitted into the air.

Repair means any process used to return a finished object or tool back to its original function or shape.

Research and development process unit means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a de minimis manner.

Short-term plating means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Startup of the tank bath is when the components or relative proportions of the various components in the bath have been altered from the most recent operating period. Startup of the bath does not include events where only the tank’s heating or agitation and other mechanical operations are turned back on after being turned off for a period of time.

Tank cover for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting heated, molten, or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying. This operation does not include spray painting at ambient temperatures.

Water curtain means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57921, Sept. 19, 2011]

§ 63.11512 Who implements and enforces this subpart?

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

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.
(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.

(2) Approval of an alternative opacity emissions standard under § 63.6(h)(9), of the General Provisions of this part.

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f), of the General Provisions of this part. A “major change to test method” is defined in § 63.90.

(4) Approval of a major change to monitoring under § 63.8(f), of the General Provisions of this part. A “major change to monitoring” is defined in § 63.90.

(5) Approval of a major change to recordkeeping and reporting under § 63.10(f), of the General Provisions of this part. A “major change to recordkeeping/reporting” is defined in § 63.90.

§ 63.11513 [Reserved]

Table 1 to Subpart WWWWWW of Part 63—Applicability of General Provisions to Plating and Polishing Area Sources

As required in § 63.11510, “What General Provisions apply to this subpart?”, you must meet each requirement in the following table that applies to you.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.1(^1)</td>
<td>Applicability.</td>
</tr>
<tr>
<td>63.2</td>
<td>Definitions.</td>
</tr>
<tr>
<td>63.3</td>
<td>Units and abbreviations.</td>
</tr>
<tr>
<td>63.4</td>
<td>Prohibited activities.</td>
</tr>
<tr>
<td>63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), and (j)</td>
<td>Compliance with standards and maintenance requirements.</td>
</tr>
<tr>
<td>63.10(a), (b)(1), (b)(2)(i)-(iii), (xiv), (b)(3), (d)(1), (f)</td>
<td>Recordkeeping and reporting.</td>
</tr>
<tr>
<td>63.12</td>
<td>State authority and delegations.</td>
</tr>
<tr>
<td>63.13</td>
<td>Addresses of State air pollution control agencies and EPA regional offices.</td>
</tr>
<tr>
<td>63.14</td>
<td>Incorporation by reference.</td>
</tr>
<tr>
<td>63.15</td>
<td>Availability of information and confidentiality.</td>
</tr>
</tbody>
</table>

\(^1\) Section 63.11505(e), “What parts of my plant does this subpart cover?”, exempts affected sources from the obligation to obtain title V operating permits.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57922, Sept. 19, 2011]
What This Subpart Covers

§63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to 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 40 CFR 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 as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.
(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).


§63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.
(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) Stationary RICE subject to limited requirements. (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
40 CFR 63, Subpart ZZZZ

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.


§63.6595 When do I have to comply with this subpart?

(a) Affected sources. (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.
(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.


Emission and Operating Limitations

§63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.


§63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

§63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.
(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart III instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.


§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

§63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such 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 operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.


Testing and Initial Compliance Requirements

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.
(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.


§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.


§63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.
§63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

\[
\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq. 1)
\]

Where:

\( C_i \) = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

\( C_o \) = concentration of CO, THC, or formaldehyde at the control device outlet, and

\( R \) = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO\(_2\)). If pollutant concentrations are to be corrected to 15 percent oxygen and CO\(_2\) concentration is measured in lieu of oxygen concentration measurement, a CO\(_2\) correction factor is needed. Calculate the CO\(_2\) correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

\[
F_o = \frac{0.209 \cdot F_d}{F_c} \quad (Eq. 2)
\]

Where:
Fo = Fuel factor based on the ratio of oxygen volume to the ultimate CO2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu).

Fc = Ratio of the volume of CO2 produced to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu)

(ii) Calculate the CO2 correction factor for correcting measurement data to 15 percent O2, as follows:

\[ X_{CO2} = \frac{5.9}{FCO} \] (Eq. 3)

Where:

\( X_{CO2} \) = CO2 correction factor, percent.

5.9 = 20.9 percent O2—15 percent O2, the defined O2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O2 using CO2 as follows:

\[ C_{adj} = C_d \times \frac{X_{CO2}}{5.9} \] (Eq. 4)

Where:

\( C_{adj} \) = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O2.

\( C_d \) = Measured concentration of CO, THC, or formaldehyde, uncorrected.

\( X_{CO2} \) = CO2 correction factor, percent.

\( %CO2 \) = Measured CO2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.


§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR
part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.
(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.


§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.
(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O2 using one of the O2 measurement methods specified in Table 4 of this subpart. Measurements to determine O2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O2 emissions simultaneously at the inlet and outlet of the control device.


Continuous Compliance Requirements

§63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.
(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the
engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.


Notifications, Reports, and Records

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following:

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.


§63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official’s name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).
(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.


§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.
(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:

1. An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

2. An existing stationary emergency RICE.

3. An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

1. An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

2. An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.


§63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).


Other Requirements and Information

§63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a
site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

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

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

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

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see §63.14).

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).
Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).
(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

*Engine startup* means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

*Four-stroke engine* means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

*Gaseous fuel* means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

*Gasoline* means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

*Glycol dehydration unit* means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

*Hazardous air pollutants (HAP)* means any air pollutants listed in or pursuant to section 112(b) of the CAA.

*Institutional emergency stationary RICE* means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

*ISO standard day conditions* means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

*Landfill gas* means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

*Lean burn engine* means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

*Limited use stationary RICE* means any stationary RICE that operates less than 100 hours per year.

*Liquefied petroleum gas* means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

*Liquid fuel* means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

*Major Source*, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;
(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NOx) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NOx, CO, and volatile organic compounds (VOC) into CO2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, the separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C3H8.
Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NOx (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.


Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

<table>
<thead>
<tr>
<th>For each</th>
<th>You must meet the following emission limitation, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 4SRB stationary RICE</td>
<td>a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or</td>
<td>Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.¹</td>
</tr>
<tr>
<td></td>
<td>b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O₂</td>
<td></td>
</tr>
</tbody>
</table>

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following operating limitation, except during periods of startup . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O₂ and using NSCR;</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.¹</td>
</tr>
<tr>
<td>2. existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or existing, new and reconstructed 4SRB stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O₂ and not using NSCR.</td>
<td>Comply with any operating limitations approved by the Administrator.</td>
</tr>
</tbody>
</table>

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following emission limitation, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2SLB stationary RICE</td>
<td>a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O₂. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O₂ until June 15, 2007</td>
<td>Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.¹</td>
</tr>
<tr>
<td>2. 4SLB stationary RICE</td>
<td>a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O₂</td>
<td></td>
</tr>
</tbody>
</table>
For each . . . You must meet the following emission limitation, except during periods of startup . . . During periods of startup you must . . .

| 3. CI stationary RICE | a. Reduce CO emissions by 70 percent or more; or |  |
| b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O₂ |

Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following operating limitation, except during periods of startup . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹</td>
</tr>
<tr>
<td>2. Existing CI stationary RICE &gt;500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</td>
<td>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹</td>
</tr>
<tr>
<td>3. New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE &gt;500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and</td>
<td>Comply with any operating limitations approved by the Administrator.</td>
</tr>
</tbody>
</table>
For each . . . | You must meet the following operating limitation, except during periods of startup . . .
---|---
eexisting CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst. | 

1Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
</table>
| 1. Emergency stationary CI RICE and black start stationary CI RICE<sup>1</sup> | a. Change oil and filter every 500 hours of operation or annually, whichever comes first.  
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;  
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.<sup>3</sup> |
| 2. Non-Emergency, non-black start stationary CI RICE <100 HP | a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.  
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;  
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |  
| 3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP | Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O<sub>2</sub>. |  

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Non-Emergency, non-black start CI stationary RICE 300&lt;HP≤500</td>
<td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O&lt;sub&gt;2&lt;/sub&gt;; or b. Reduce CO emissions by 70 percent or more.</td>
<td></td>
</tr>
<tr>
<td>5. Non-Emergency, non-black start stationary CI RICE &gt;500 HP</td>
<td>a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O&lt;sub&gt;2&lt;/sub&gt;; or b. Reduce CO emissions by 70 percent or more.</td>
<td></td>
</tr>
<tr>
<td>6. Emergency stationary SI RICE and black start stationary SI RICE</td>
<td>a. Change oil and filter every 500 hours of operation or annually, whichever comes first; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>7. Non-Emergency, non-black start stationary SI RICE &lt;100 HP that are not 2SLB stationary RICE</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>8. Non-Emergency, non-black start 2SLB stationary SI RICE &lt;100 HP</td>
<td>a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>For each . . .</td>
<td>You must meet the following requirement, except during periods of startup . . .</td>
<td>During periods of startup you must . . .</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O₂.</td>
<td></td>
</tr>
<tr>
<td>10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O₂.</td>
<td></td>
</tr>
<tr>
<td>11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500</td>
<td>Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O₂.</td>
<td></td>
</tr>
<tr>
<td>12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O₂.</td>
<td></td>
</tr>
</tbody>
</table>

1If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

2Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

3Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]
Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
</table>
| 1. Non-Emergency, non-black start CI stationary RICE ≤300 HP | a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;¹  
   b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;  
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. |
| 2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500 | a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O₂; or  
   b. Reduce CO emissions by 70 percent or more. | |
| 3. Non-Emergency, non-black start CI stationary RICE >500 HP | a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O₂; or  
   b. Reduce CO emissions by 70 percent or more. | |
| 4. Emergency stationary CI RICE and black start stationary CI RICE.² | a. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹  
   b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and  
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | |
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must meet the following requirement, except during periods of startup . . .</th>
<th>During periods of startup you must . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE &gt;500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE &gt;500 HP that operate 24 hours or less per calendar year.²</td>
<td>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹ b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>6. Non-emergency, non-black start 2SLB stationary RICE</td>
<td>a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>8. Non-emergency, non-black start 4SLB remote stationary RICE &gt;500 HP</td>
<td>a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td>For each . . .</td>
<td>You must meet the following requirement, except during periods of startup . . .</td>
<td>During periods of startup you must . . .</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>9. Non-emergency, non-black start 4SLB stationary RICE &gt;500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year</td>
<td>Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.</td>
<td></td>
</tr>
<tr>
<td>10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>11. Non-emergency, non-black start 4SRB remote stationary RICE &gt;500 HP</td>
<td>a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.</td>
<td></td>
</tr>
<tr>
<td>12. Non-emergency, non-black start 4SRB stationary RICE &gt;500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year</td>
<td>Install NSCR to reduce HAP emissions from the stationary RICE.</td>
<td></td>
</tr>
<tr>
<td>13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis</td>
<td>a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and</td>
<td></td>
</tr>
</tbody>
</table>
For each... You must meet the following requirement, except during periods of startup... During periods of startup you must...

1. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

1Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

2If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

<table>
<thead>
<tr>
<th>For each...</th>
<th>Complying with the requirement to...</th>
<th>You must...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed 2SLB stationary RICE &gt;500 HP located at major sources; new or reconstructed 4SLB stationary RICE &gt;250 HP located at major sources; and new or reconstructed CI stationary RICE &gt;500 HP located at major sources</td>
<td>Reduce CO emissions and not using a CEMS</td>
<td>Conduct subsequent performance tests semiannually.</td>
</tr>
<tr>
<td>2. 4SRB stationary RICE ≥5,000 HP located at major sources</td>
<td>Reduce formaldehyde emissions</td>
<td>Conduct subsequent performance tests semiannually.</td>
</tr>
<tr>
<td>3. Stationary RICE &gt;500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources</td>
<td>Limit the concentration of formaldehyde in the stationary RICE exhaust</td>
<td>Conduct subsequent performance tests semiannually.</td>
</tr>
<tr>
<td>4. Existing non-emergency, non-black start CI stationary RICE &gt;500 HP that are not limited use stationary RICE</td>
<td>Limit or reduce CO emissions and not using a CEMS</td>
<td>Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.</td>
</tr>
<tr>
<td>5. Existing non-emergency, non-black start CI stationary RICE &gt;500 HP that are limited use stationary RICE</td>
<td>Limit or reduce CO emissions and not using a CEMS</td>
<td>Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.</td>
</tr>
</tbody>
</table>

1After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]
Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2SLB, 4SLB, and CI stationary RICE</td>
<td>a. reduce CO emissions</td>
<td>i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and</td>
<td>(a) For CO and O₂ measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts &gt;6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is &gt;12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>ii. Measure the O₂ at the inlet and outlet of the control device; and</td>
<td>(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)(^ac) (heated probe not necessary)</td>
<td>(b) Measurements to determine O₂ must be made at the same time as the measurements for CO concentration.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>iii. Measure the CO at the inlet and the outlet of the control device</td>
<td>(1) ASTM D6522-00 (Reapproved 2005)(^abc) (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4</td>
<td>(c) The CO concentration must be at 15 percent O₂, dry basis.</td>
<td></td>
</tr>
</tbody>
</table>
For each . . . | Complying with the requirement to . . . | You must . . . | Using . . . | According to the following requirements . . .
--- | --- | --- | --- | ---
2. 4SRB stationary RICE | a. reduce formaldehyde emissions | i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)\(^a\) (heated probe not necessary) | (a) For formaldehyde, \(O_2\), and moisture measurement, ducts \(\leq 6\) inches in diameter may be sampled at a single point located at the duct centroid and ducts \(>6\) and \(\leq 12\) inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. |
| | | ii. Measure \(O_2\) at the inlet and outlet of the control device; and | (1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03\(^a\) | (a) Measurements to determine \(O_2\) concentration must be made at the same time as the measurements for formaldehyde or THC concentration. |
| | | iii. Measure moisture content at the inlet and outlet of the control device; and | (1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03\(^a\), provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent \(R\) must be greater than or equal to 70 and less than or equal to 130 | (a) Formaldehyde concentration must be at 15 percent \(O_2\), dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| | | iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device | (1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7 | (a) THC concentration must be at 15 percent \(O_2\), dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| | | v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device | |
For each . . . | Complying with the requirement to . . . | You must . . . | Using . . . | According to the following requirements . . .
---|---|---|---|---
3. Stationary RICE | a. limit the concentration of formaldehyde or CO in the stationary RICE exhaust | i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and | (a) For formaldehyde, CO, \(O_2\), and moisture measurement, ducts \(\leq 6\) inches in diameter may be sampled at a single point located at the duct centroid and ducts \(>6\) and \(\leq 12\) inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is \(>12\) inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at ‘3-point long line’; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device. | |

ii. Determine the \(O_2\) concentration of the stationary RICE exhaust at the sampling port location; and | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)\(^a\) (heated probe not necessary) | (a) Measurements to determine \(O_2\) concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration. | |

iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and | (1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03\(^a\) | (a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration. | |

iv. Measure formaldehyde at the exhaust of the stationary RICE; or | (1) Method 320 or 323 of 40 CFR part 63, appendix A, or ASTM D6348-03\(^a\), provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent \(R\) must be greater than or equal to 70 and less than or equal to 130 | (a) Formaldehyde concentration must be at 15 percent \(O_2\), dry basis. Results of this test consist of the average of the three 1-hour or longer runs. | |

v. measure CO at the exhaust of the stationary RICE | (1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005)\(^c\), Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03\(^a\) | (a) CO concentration must be at 15 percent \(O_2\), dry basis. Results of this test consist of the average of the three 1-hour or longer runs. | |
Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
</table>
| 1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Reduce CO emissions and using oxidation catalyst, and using a CPMS | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and  
ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and  
iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  
ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and  
iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Reduce CO emissions and not using oxidation catalyst | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and  
ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and  
iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
</table>
| 4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Limit the concentration of CO, and not using oxidation catalyst | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  
ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and  
iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Reduce CO emissions, and using a CEMS | i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and  
ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and  
iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period. |
| 6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP | a. Limit the concentration of CO, and using a CEMS | i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and  
ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and  
iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period. |
| 7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce formaldehyde emissions and using NSCR | i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and  
ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and  
iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period. |
For each . . . | Complying with the requirement to . . . | You have demonstrated initial compliance if . . .
--- | --- | ---

**8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP**

- a. Reduce formaldehyde emissions and not using NSCR
  - i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
- ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
- iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

**9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP**

- a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR
  - i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
  - ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
  - iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

**10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP**

- a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR
  - i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
  - ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
  - iii. You have recorded the approved operating parameters (if any) during the initial performance test.

**11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP**

- a. Reduce CO emissions
  - i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You have demonstrated initial compliance if . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP and existing non-emergency stationary CI RICE 300&lt;HP≤500 located at an area source of HAP</td>
<td>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust</td>
<td>i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.</td>
</tr>
<tr>
<td>13. Existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</td>
<td>a. Install an oxidation catalyst</td>
<td>i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350°F.</td>
</tr>
<tr>
<td>14. Existing non-emergency 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year</td>
<td>a. Install NSCR</td>
<td>i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more; ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250°F.</td>
</tr>
</tbody>
</table>

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS</td>
<td>i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You must demonstrate continuous compliance by . . .</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>2. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS</td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</td>
</tr>
<tr>
<td>3. New or reconstructed non-emergency 2SLB stationary RICE &gt;500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and existing non-emergency stationary CI RICE &gt;500 HP</td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS</td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>4. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Reduce formaldehyde emissions and using NSCR</td>
<td>i. Collecting the catalyst inlet temperature data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</td>
</tr>
<tr>
<td>For each . . .</td>
<td>Complying with the requirement to . . .</td>
<td>You must demonstrate continuous compliance by . . .</td>
</tr>
<tr>
<td>----------------</td>
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<td>-----------------------------------------------</td>
</tr>
<tr>
<td>5. Non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP</td>
<td>a. Reduce formaldehyde emissions and not using NSCR</td>
<td>i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP</td>
<td>a. Reduce formaldehyde emissions</td>
<td>Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.a</td>
</tr>
<tr>
<td>7. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR</td>
<td>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Collecting the operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>8. New or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</td>
<td>a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR</td>
<td>i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
</tbody>
</table>
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Work or Management practices</td>
<td>i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.</td>
<td></td>
</tr>
</tbody>
</table>

10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE

| a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |

11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE

<p>| a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and |</p>
<table>
<thead>
<tr>
<th>For each . . .</th>
<th>Complying with the requirement to . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
</tr>
<tr>
<td>12. Existing limited use CI stationary RICE &gt;500 HP</td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst</td>
<td>i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>iii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</td>
</tr>
<tr>
<td>13. Existing limited use CI stationary RICE &gt;500 HP</td>
<td>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst</td>
<td>i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</td>
</tr>
<tr>
<td></td>
<td>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
<td>iii. Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</td>
<td></td>
</tr>
<tr>
<td>For each...</td>
<td>Complying with the requirement to...</td>
<td>You must demonstrate continuous compliance by...</td>
</tr>
<tr>
<td>-------------</td>
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<td>---------------------------------------------</td>
</tr>
<tr>
<td>14. Existing non-emergency 4SLB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year</td>
<td>a. Install an oxidation catalyst</td>
<td>i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.</td>
</tr>
</tbody>
</table>

15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install NSCR | i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F. |

*aAfter you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]
### Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must submit a . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existing non-emergency, non-black start stationary RICE 100s≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE &gt;500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE &gt;300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE &gt;500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP</td>
<td>Compliance report</td>
<td>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</td>
<td>i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.</td>
</tr>
<tr>
<td>2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis</td>
<td>Report</td>
<td>b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or</td>
<td>i. Semiannually according to the requirements in §63.6650(b).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).</td>
<td>i. Semiannually according to the requirements in §63.6650(b).</td>
</tr>
<tr>
<td>3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE &gt;500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year</td>
<td>Compliance report</td>
<td>a. The results of the annual compliance demonstration, if conducted during the reporting period.</td>
<td>i. Semiannually according to the requirements in §63.6650(b)(1)-(5).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and</td>
<td>i. See item 2.a.i.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Any problems or errors suspected with the meters.</td>
<td>i. See item 2.a.i.</td>
</tr>
</tbody>
</table>
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4)(ii)

<table>
<thead>
<tr>
<th>For each . . .</th>
<th>You must submit a . . .</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report</td>
<td>a. The information in §63.6650(h)(1)</td>
<td>i. annually according to the requirements in §63.6650(h)(2)-(3)</td>
<td></td>
</tr>
</tbody>
</table>

[78 FR 6719, Jan. 30, 2013]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

<table>
<thead>
<tr>
<th>General provisions citation</th>
<th>Subject of citation</th>
<th>Applies to subpart</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>General applicability of the General Provisions</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Yes</td>
<td>Additional terms defined in §63.6675.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and abbreviations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited activities and circumvention</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction and reconstruction</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(1)-(4)</td>
<td>Compliance dates for new and reconstructed sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance dates for new and reconstructed area sources that become major sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(1)-(2)</td>
<td>Compliance dates for existing sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(3)-(4)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance dates for existing area sources that become major sources</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)</td>
<td>Operation and maintenance</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Applicability of standards</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(2)</td>
<td>Methods for determining compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)(3)</td>
<td>Finding of compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(g)(1)-(3)</td>
<td>Use of alternate standard</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Opacity and visible emission standards</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or visible emission standards.</td>
</tr>
<tr>
<td>§63.6(i)</td>
<td>Compliance extension procedures and criteria</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to subpart</td>
<td>Explanation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential compliance exemption</td>
<td>Yes</td>
<td>Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.</td>
</tr>
<tr>
<td>§63.7(a)(1)-(2)</td>
<td>Performance test dates</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.</td>
</tr>
<tr>
<td>§63.7(a)(3)</td>
<td>CAA section 114 authority</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(b)(1)</td>
<td>Notification of performance test</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(b)(2)</td>
<td>Notification of rescheduling</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality assurance/test plan</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Testing facilities</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(e)(1)</td>
<td>Conditions for conducting performance tests</td>
<td>No</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(e)(2)</td>
<td>Conduct of performance tests and reduction of data</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(e)(3)</td>
<td>Test run duration</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(e)(4)</td>
<td>Administrator may require other testing under section 114 of the CAA</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative test method provisions</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance test data analysis, recordkeeping, and reporting</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of tests</td>
<td>Yes</td>
<td>Subpart ZZZZ specifies test methods at §63.6620.</td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Applicability of monitoring requirements</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(a)(2)</td>
<td>Performance specifications</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>[Reserved]</td>
<td></td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring for control devices</td>
<td>No</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(b)(1)</td>
<td>Monitoring</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(b)(2)-(3)</td>
<td>Multiple effluents and multiple monitoring systems</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(1)</td>
<td>Monitoring system operation and maintenance</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(1)(i)</td>
<td>Routine and predictable SSM</td>
<td>No</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(1)(ii)</td>
<td>SSM not in Startup Shutdown Malfunction Plan</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(1)(iii)</td>
<td>Compliance with operation and maintenance requirements</td>
<td>No</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(2)-(3)</td>
<td>Monitoring system installation</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous monitoring system (CMS) requirements</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>§63.8(c)(5)</td>
<td>COMS minimum procedures</td>
<td>No</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
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<tr>
<td>§63.8(c)(6)-(8)</td>
<td>CMS requirements</td>
<td>Yes</td>
<td>Subpart ZZZZ contains specific requirements for monitoring at §63.6625.</td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to subpart</td>
<td>Explanation</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>§63.8(d)</td>
<td>CMS quality control</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.8(e)</td>
<td>CMS performance evaluation</td>
<td>Yes</td>
<td>Except for §63.8(e)(5)(ii), which applies to COMS.</td>
</tr>
<tr>
<td>§63.8(f)(1)-(5)</td>
<td>Alternative monitoring method</td>
<td>Yes</td>
<td>Except that §63.8(f)(4) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>Alternative to relative accuracy test</td>
<td>Yes</td>
<td>Except that §63.8(f)(6) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.8(g)</td>
<td>Data reduction</td>
<td>Yes</td>
<td>Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Applicability and State delegation of notification requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(b)(1)-(5)</td>
<td>Initial notifications</td>
<td>Yes</td>
<td>Except that §63.9(b)(3) is reserved.</td>
</tr>
<tr>
<td>§63.9(c)</td>
<td>Request for compliance extension</td>
<td>Yes</td>
<td>Except that §63.9(c) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification of special compliance requirements for new sources</td>
<td>Yes</td>
<td>Except that §63.9(d) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of performance test</td>
<td>Yes</td>
<td>Except that §63.9(e) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of visible emission (VE)/opacity test</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
</tr>
<tr>
<td>§63.9(g)(1)</td>
<td>Notification of performance evaluation</td>
<td>Yes</td>
<td>Except that §63.9(g) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(g)(2)</td>
<td>Notification of use of COMS data</td>
<td>No</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
</tr>
<tr>
<td>§63.9(g)(3)</td>
<td>Notification that criterion for alternative to RATA is exceeded</td>
<td>Yes</td>
<td>If alternative is in use.</td>
</tr>
<tr>
<td>§63.9(h)(1)-(6)</td>
<td>Notification of compliance status</td>
<td>Yes</td>
<td>Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.</td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of submittal deadlines</td>
<td>Yes</td>
<td>Except that §63.9(h) only applies as specified in §63.6645.</td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in previous information</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>General provisions citation</td>
<td>Subject of citation</td>
<td>Applies to subpart</td>
<td>Explanation</td>
</tr>
<tr>
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<td>----------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Administrative provisions for recordkeeping/reporting</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>Record retention</td>
<td>Yes.</td>
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</tr>
<tr>
<td>§63.10(b)(2)(i)-(v)</td>
<td>Records related to SSM</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(vi)-(xi)</td>
<td>Records</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Record when under waiver</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(xiii)</td>
<td>Records when using alternative to RATA</td>
<td>Yes.</td>
<td>For CO standard if using RATA alternative.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xiv)</td>
<td>Records of supporting documentation</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Records of applicability determination</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)</td>
<td>Additional records for sources using CEMS</td>
<td>Yes.</td>
<td>Except that §63.10(c)(2)-(4) and (9) are reserved.</td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>General reporting requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>Report of performance test results</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Reporting opacity or VE observations</td>
<td>No.</td>
<td>Subpart ZZZZ does not contain opacity or VE standards.</td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Progress reports</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(5)</td>
<td>Startup, shutdown, and malfunction reports</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(1) and (2)(i)</td>
<td>Additional CMS Reports</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(e)(2)(ii)</td>
<td>COMS-related report</td>
<td>No.</td>
<td>Subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Excess emission and parameter exceedances reports</td>
<td>Yes.</td>
<td>Except that §63.10(e)(3)(i) (C) is reserved.</td>
</tr>
<tr>
<td>§63.10(e)(4)</td>
<td>Reporting COMS data</td>
<td>No.</td>
<td>Subpart ZZZZ does not require COMS.</td>
</tr>
<tr>
<td>§63.10(f)</td>
<td>Waiver for recordkeeping/reporting</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.11</td>
<td>Flares</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.12</td>
<td>State authority and delegations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.13</td>
<td>Addresses</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.14</td>
<td>Incorporation by reference</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.15</td>
<td>Availability of information</td>
<td>Yes.</td>
<td></td>
</tr>
</tbody>
</table>

Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 Scope and Application. What is this Protocol?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O₂) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O₂).

<table>
<thead>
<tr>
<th>Analyte</th>
<th>CAS No.</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>630-08-0</td>
<td>Minimum detectable limit should be 2 percent of the nominal range or 1 ppm,</td>
</tr>
<tr>
<td>(CO)</td>
<td></td>
<td>whichever is less restrictive.</td>
</tr>
<tr>
<td>Oxygen (O₂)</td>
<td>7782-44-7</td>
<td></td>
</tr>
</tbody>
</table>

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O₂, or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 Summary of Protocol

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O₂ gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 Definitions

3.1 Measurement System. The total equipment required for the measurement of CO and O₂ concentrations. The measurement system consists of the following major subsystems:
3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O2 and moisture in the electrolyte reserve and provides a mechanism to degas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre-sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.
3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 Interferences.

When present in sufficient concentrations, NO and NO₂ are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 Safety. [Reserved]

6.0 Equipment and Supplies.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O₂ concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O₂; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.
6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 Reagents and Standards. What calibration gases are needed?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O₂. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O₂) is acceptable for calibration of the O₂ cell. If needed, any lower percentage O₂ calibration gas must be a mixture of O₂ in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O₂ Calibration Gas Concentration.

Select an O₂ gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O₂. When the average exhaust gas O₂ readings are above 6 percent, you may use dry ambient air (20.9 percent O₂) for the up-scale O₂ calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO₂).

8.0 Sample Collection and Analysis

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O₂ concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ±3 percent, as instructed by the EC cell manufacturer.

9.0 Quality Control (Reserved)
10.0 Calibration and Standardization

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O₂ and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ±3 percent of the up-scale gas value or ±1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ±0.3 percent O₂ for the O₂ channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this "sample conditioning phase" once per minute until readings are constant for at least two minutes. Then begin the "measurement data phase" and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to ±5 percent or ±1 ppm for CO or ±0.5 percent O₂, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to ±2 percent or ±1 ppm for CO or ±0.5 percent O₂, whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

12.0 Calculations and Data Analysis

Determine the CO and O₂ concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

13.0 Protocol Performance

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is ±2 percent, or ±1 ppm,
whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ±2 percent or ±1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed.

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO₂ gas standards that are generally recognized as representative of diesel-fueled engine NO and NO₂ emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO₂ interference response should be less than or equal to ±5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average "measurement data phase" CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 Pollution Prevention (Reserved)

15.0 Waste Management (Reserved)

16.0 Alternative Procedures (Reserved)

17.0 References


(3) "ICAC Test Protocol for Periodic Monitoring", EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.

Table 1: Appendix A—Sampling Run Data.

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[78 FR 6721, Jan. 30, 2013]
On April 25, 2019, Dormakaba USA Inc. submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Dormakaba USA Inc. relating to the operation of a stationary security products manufacturing operation. Dormakaba USA Inc. was issued its first MSOP Renewal (M097-26700-00119) on August 25, 2009.

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.

The source consists of the following permitted emission units:

(a) One (1) cold cleaner degreasing operation, identified as U1, consisting of cold cleaner degreasing dip tanks without a remote solvent reservoir and utilizing 5200 gallons of non-VOC containing solvent (bio-circle) a year.

(b) One (1) Pero solvent cleaning vacuum degreasing operation, identified as U7, constructed in 2012, consisting of a sealed degreasing unit, with a remote solvent reservoir with a 220 gallon solvent tank and using 832 gallons of n-Propyl Bromide or M6386 solvent a year. Spent cleaning solvent is shipped off-site for recycling or treatment.
(c) One (1) buffing/sanding/polishing operation, identified as U2, using brass, bronze and steel barstock as raw material with a maximum rate of 380 lb/hr, and particulate emissions controlled by nineteen (19) dust collectors, exhausting indoors.

(d) One (1) decorative chromium electroplating operation, identified as U3, installed in December 1989, consisting of one decorative chromium electroplating tank and hexavalent chromium bath with a maximum rectifier capacity of 3,000 amps and a maximum cumulative rectifier capacity of 17,640,000 amp-hours, equipped with a packed-bed scrubber and composite mesh-pad mist eliminator for chromium control, exhausting to stack S1.

[Under 40 CFR 63, Subpart N, this unit is considered an affected facility]

(e) One (1) nickel plating operation, identified as U4, installed in December 1989, consisting of one (1) automatic nickel plate tank with a rectifier capacity of 4,000 amps and a manual bright nickel plater with a rectifier capacity of 500 amps equipped with a wet scrubber/evaporator for nickel control, exhausting to stack S2.

[Under 40 CFR 63, Subpart WWWWWW, this unit is considered an affected facility.]

(f) One (1) HVLP surface coating spray booth for coating brass locks and booth wells, identified as U5, installed in January 1985, with a maximum of 0.0008 gallons per unit and 70 units per hour, with dry filters for particulate control and exhausting to stack S3.

(g) One (1) HVLP surface coating spray booth for coating mullions, Ryobi arms and vertical rods, identified as U6, installed in September 2007, with a maximum of 0.0009 gallons per unit and 65 units per hour, with dry filters for particulate control and exhausting to S4.

(h) One (1) robotic polishing operation, identified as RP2, with a maximum throughput of 320 parts/hour, approved in 2009 for construction, with particulate matter emissions controlled by a baghouse, identified as BH-RP2, exhausting inside the building.

(i) One (1) inert gas welding/flame-cutting operation, identified as Welding/Flame Cutting-#1, with a maximum input rate of 0.06 lbs/hr of wire and flame cutting utilizing oxygen acetylene with a maximum metal thickness of 1 1/8 inch and 2 in/min cutting rate.

(j) One (1) Powder Coating Line, identified as Powder Coating Operation, installed in December 1993, consisting of spray booth, two (2) guns with maximum capacity of 3.75 pounds of powder per hour each, a natural gas-fired dryer and curing oven, with maximum heat input rates of 0.20, 0.80 and 0.80 MMBtu/hr, respectively and emission controlled by a baghouse.

(k) Two (2) natural gas fueled electric emergency generators, identified as Generator-1, installed in 2000, and Generator 3, installed in April 2007, with output rates of 60 KW/hr and 130 KW/hr and maximum heat input rates of 1.005 and 2.17 MMBtu/hr, respectively.

[Under 40 CFR 63, Subpart ZZZZ (4Z), the above emission units are considered affected facilities.]

(l) One (1) natural gas fueled boiler, identified as 3000 Boiler Room - A, installed in January 2013, with a maximum heat input rate of 1.99 MMBtu/hr, exhausting through a stack.

(m) One (1) natural gas fueled boiler, identified as old 3000 Boiler Room - B, installed in July 1986, with a maximum heat input rate of 2.4 MMBtu/hr, exhausting through a stack.

(n) One (1) natural gas fueled boiler, identified as Plating 1000, installed in January 2010, with a maximum heat input rate of 2.05 MMBtu/hr, exhausting through a stack.

(o) One (1) natural gas fueled boiler, identified as 1000 Boiler Room, installed in March 2013, with a maximum heat input rate of 1.50 MMBtu/hr.
(p) Three (3) natural gas fueled water heaters, identified as Restrooms, with a combined maximum heat input rate of 0.92 MMBtu per hour.

(q) Thirty-One (31) natural gas fueled space heating units, identified as HV/AC Units, with a combined maximum heat input rate of 7.16 MMBtu per hour.

(r) Four (4) natural gas fueled air make up units, identified as Hartzell Units, with a combined maximum heat input rate of 10 MMBtu/hr.

(s) Miscellaneous cleaner/coating/solvent usage with maximum throughput of 2,190 gallons per year.

The source also consists of the following emission units that were constructed and/or operated without a permit:

(a) Twenty-eight (28) wet machining operations, each with a nominal air flow rate of 1,000 acfm, and each equipped with a mist collector for particulate control and exhausting indoors.

(b) Two (2) robot polishing operations, identified as RP-A and RP-B, constructed in 2009, each equipped with a baghouse for particulate control, and exhausting indoors.

(c) Two (2) robot polishing operation, identified as RP-C and PR-D, constructed in 2016, each equipped with a baghouse for particulate control, and exhausting indoors.

---

**Emission Units and Pollution Control Equipment Removed From the Source**

The source has removed the following emission units:

(a) One (1) natural gas fueled electric emergency generator, identified as Generator-2, installed in 2000, with output rates of 20 KW/hr and maximum heat input rates of 0.329 MMBtu/hr.

(b) One (1) natural gas fueled boiler, identified as 3000 Boiler Room, installed in July 1986, with a maximum heat input rate of 2.1 MMBtu/hr.

(c) One (1) natural gas fueled boiler, identified as Plating 1000, installed in December 1989, with a maximum heat input rate of 2.4 MMBtu/hr.

(d) One (1) natural gas fueled boiler, identified as 1000 Boiler Room, installed in October 1983, with a maximum heat input rate of 1.2 MMBtu/hr.

(e) One (1) natural gas-fired boiler, identified as Heat Table, installed in November 2012, with a maximum heat input rate of 240,000 Btu/hr.

---

**Emission Units and Pollution Control Equipment Constructed Under the Provisions of 326 IAC 2-1.1-3 (Exemptions)**

The following existing emissions unit(s), constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions), are being incorporated in the permit as part of this permitting action:

**Project #1 (2010)**

(a) One (1) natural gas fueled boiler, identified as Plating 1000, installed in January 2010, with a maximum heat input rate of 2.05 MMBtu/hr.

**Project #2 (2013)**
(a) One (1) natural gas fueled boiler, identified as 3000 Boiler Room - A, installed in January 2013, with a maximum heat input rate of 1.99 MMBtu/hr.

(b) One (1) natural gas fueled boiler, identified as 1000 Boiler Room, installed in March 2013, with a maximum heat input rate of 1.50 MMBtu/hr.

The total potential to emit of each project is less than levels specified at 326 IAC 2-1.1-3(e)(1)(A) through (G) and the addition of the emission units did not require the source to transition to a higher operation permit level. Therefore, pursuant to 326 IAC 2-1.1-3(e), including the requirement to submit an application, do not apply to these emission units. See Appendix A of this Technical Support Document for detailed emission calculations.

**Enforcement Issue**

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

**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

**County Attainment Status**

The source is located in Marion County (Lawrence Township).

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
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<tr>
<td>SO₂</td>
<td>Nonattainment effective October 4, 2013, for the 2010 SO₂ standard for Center, Perry, and Wayne townships. Better than national standards for the remainder of the county.</td>
</tr>
<tr>
<td>CO</td>
<td>Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.¹</td>
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<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM₂.₅ standard.</td>
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<td>PM₁₀</td>
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<tr>
<td>NO₂</td>
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</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
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¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOₓ) 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 NOₓ emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
(b) PM$_{2.5}$
Marion County has been classified as attainment for PM$_{2.5}$. Therefore, direct PM$_{2.5}$, SO$_2$, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Marion County has been classified as attainment or unclassifiable in Indiana for all the 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 (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants 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.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

The fugitive emissions of criteria pollutants and hazardous air pollutants (HAP) are counted toward the determination of MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

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<tr>
<th>Unrestricted Potential Emissions (ton/year)</th>
<th>PM$^1$</th>
<th>PM$_{10}^1$</th>
<th>PM$_{2.5}^1,2$</th>
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<th>CO</th>
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<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
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<td>97.74</td>
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### Unrestricted Potential Emissions (ton/year)

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\(^1\) Under the Part 70 Permit program (40 CFR 70), PM\(_{10}\) and PM\(_{2.5}\), not particulate matter (PM), are each considered as a "regulated air pollutant."

\(^2\) PM\(_{2.5}\) listed is direct PM\(_{2.5}\).

\(^3\) Single highest source-wide HAP.

*Fugitive HAP emissions are always included in the source-wide emissions.

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

(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, PM, PM\(_{10}\) and PM\(_{2.5}\) is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) 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(30)) 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. The source will be issued an MSOP Renewal.

### Description of Proposed Revision at an Existing Source

The Office of Air Quality (OAQ) has reviewed an application, submitted by Dormakaba USA Inc. on April 26, 2019, relating to a Minor Source Operating Permit (MSOP) Renewal with New Source Review (NSR).

The following is a list of the new emission units and pollution control device(s):

(a) One (1) parts washer, approved in 2019 for construction, with a maximum usage of three hundred sixty (360) gallons of M2750 solvent a year.

(b) One (1) robot polishing operation, identified as RP-E, approved in 2019 for construction, with a maximum throughput of 120 parts/hour, and equipped with a baghouse for particulate control, and exhausting indoors.

(c) One (1) metal hinge saw for cutting the raw material for hinge manufacturing, approved in 2019 for construction, with a maximum capacity of 100 hinges per day, equipped with a dust collector for particulate control and exhausting indoors.

### Permit Level Determination – MSOP Minor Permit Revision

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. If the control equipment has been determined
to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

**PTE Before Controls of the New Emission Units (ton/year)**

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM₁₀</th>
<th>PM₂.₅¹</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP²</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parts Washer (M2750)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.88E-03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Robotic Polishing Operation (RP-E)</td>
<td>10.76</td>
<td>10.76</td>
<td>10.76</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Hinge Saw</td>
<td>0.53</td>
<td>0.53</td>
<td>0.53</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total PTE Before Controls of the New Emission Units:</strong></td>
<td><strong>11.29</strong></td>
<td><strong>11.29</strong></td>
<td><strong>11.29</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
<td><strong>2.88E-03</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
</tr>
</tbody>
</table>

¹PM₂.₅ listed is direct PM₂.₅.
²Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the proposed revision.

Pursuant to 326 IAC 2-6.1-6(g)(3), this MSOP is revised through a Minor Permit Revision because the proposed revision involves the construction of new emission units with a potential to emit within the following ranges:

(A) Less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year of either PM, PM₁₀, or direct PM₂.₅.

This revision will be added to the permit as part of this MSOP Renewal w/ NSR.

**Potential to Emit of the Entire Source After Issuance**

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

**Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)**

<table>
<thead>
<tr>
<th></th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹, ²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP³</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total PTE of Entire Source</strong></td>
<td>96.65</td>
<td>97.32</td>
<td>97.32</td>
<td>0.07</td>
<td>13.46</td>
<td>5.10</td>
<td>12.37</td>
<td>1.58 (Nickel)</td>
<td>4.62</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>--</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt; 100</td>
<td>&lt; 10</td>
<td>&lt; 25</td>
<td></td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."
²PM₂.₅ listed is direct PM₂.₅.
³Single highest source-wide HAP
*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
(b) This existing source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

**Federal Rule Applicability**

Federal rule applicability for this source has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, are not included in the permit for the natural gas fired boilers, identified as 3000 Boiler Room, Plating 1000 and 1000 Boiler Room because the maximum heat input capacity is less than 10 MMBtu/hr each.

(b) The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart III, which is incorporated by reference as 326 IAC 12, are not included in the permit for the natural gas fueled emergency generators, identified as Generator-1 and Generator-2 because these units are not Internal Combustion Engine (ICE), these units are spark ignition engines.

(c) The requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ, are not included in the permit for the two (2) natural gas fueled generators, identified as Generator-1 and Generator-3, because the generators are emergency engines that were manufactured prior to January 1, 2009.

(d) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit.

**National Emission Standards for Hazardous Air Pollutants (NESHAP):**

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63, Subpart T and 326 IAC 20-6-1 are not included in the permit for the degreasing operation, since no halogenated solvents listed in 40 CFR Part 63.460 are used in the degreasing operation.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX are not included in the permit for this facility, since the source does not own or operate an area source that is primarily engaged in the operations associated with any of nine fabrication and finishing source categories subject to this rule.

(g) The decorative chromium electroplating operation, identified as U3 is subject to the National Emission Standards for Hazardous Air Pollutants for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, 40 CFR 63, Subpart N, which is incorporated by reference as 326 IAC 20-8, because this rule applies to decorative chromium electroplating operations.

The decorative chromium electroplating operation, identified as U3, consisting of one decorative chromium electroplating tank with a hexavalent chromium bath is subject to the following portions of Subpart N:

1. 40 CFR 63.340 (a), (b), (c), and (e).
2. 40 CFR 63.341.
3. 40 CFR 63.342 (a), (b)(1), (d), (f), and (g).
4. Table 1 Stalagmometer Requirement
The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart N.

(h) The nickel plating operation, identified as U4, is subject to the National Emission Standards for Hazardous Air Pollutants for Area Source Standards for Plating and Polishing Operations, 40 CFR 63, Subpart WWWW, because this rule is applicable to non-chromium electroplating processes.

The nickel plating operation, identified as U4, is subject to the following portions of Subpart WWWW:

(1) 40 CFR 63.11504 (a)(1)(i) and (a)(2)
(2) 40 CFR 63.11505 (a)(1) and (b)
(3) 40 CFR 63.11506 (a)
(4) 40 CFR 63.11507 (a) and (g)
(5) 40 CFR 63.11508 (a), (b), (c)(2), (d)(1), (d)(2), (d)(4), and (d)(8)
(6) 40 CFR 63.11509 (a)(1), (a)(2), (a)(3), (b), (c)(2), (c)(6), (c)(7), (d), (e), and (f)
(7) 40 CFR 63.11510
(8) 40 CFR 63.115011
(9) 40 CFR 63.115012
(10) 40 CFR 63, Subpart WWWW, Table 1

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart WWWW.

(i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Painting Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH are not included in the permit for this facility, since the HVLP surface coating spray booths, identified as U5 and U6, do not perform spray application of coatings that contain any target HAPs.

(j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM and 326 IAC 20-80 are not included in the permit for this facility, since the source is not a major source of HAPs that uses 946 liters per year, or more, of coatings that contain HAPs in the surface coating of miscellaneous metal parts and products.

(k) The natural gas fueled electric emergency generator, identified as Generator-1 is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ, which is incorporated by reference as 326 IAC 20-82, because Generator-1 is considered an existing stationary reciprocating internal combustion engine (RICE) (construction commenced before June 12, 2006) at an area source of hazardous air pollutants (HAP). Generator-3 is considered a new stationary reciprocating internal combustion engine (RICE), located at an area source of HAP that commenced construction after June 12, 2006.

The natural gas fueled electric emergency generator, identified as Generator-1, is subject to the following portions of Subpart ZZZZ:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

The natural gas fueled electric emergency generator, identified as Generator-3, is subject to the following portions of Subpart ZZZZ:

1. 40 CFR 63.6580
2. 40 CFR 63.6585
3. 40 CFR 63.6590(a)(2)(iii) and (c)(1)
4. 40 CFR 63.6595(a)(6)
5. 40 CFR 63.6665
6. 40 CFR 63.6670
7. 40 CFR 63.6675
8. Table 2d (item 5)
9. Table 6 (item 9)
10. Table 8

Based on this evaluation, this source is subject to 40 CFR 63, Subpart ZZZZ. On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 63.6640(f)(2)(ii) - (iii) of NESHAP Subpart ZZZZ. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA’s Guidance Memo:

Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as strikethrough text. At this time, IDEM is not making any changes to the permit’s attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 63.6640(f)(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government,
the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(l) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included in the permit.

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.

<table>
<thead>
<tr>
<th>State Rule Applicability - Entire Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>326 IAC 1-6-3 (Preventive Maintenance Plan)</td>
</tr>
<tr>
<td>The source is subject to 326 IAC 1-6-3.</td>
</tr>
<tr>
<td>326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))</td>
</tr>
<tr>
<td>MSOP applicability is discussed under the Potential to Emit After Issuance section of this document.</td>
</tr>
<tr>
<td>326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))</td>
</tr>
<tr>
<td>The operation of this source will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.</td>
</tr>
<tr>
<td>326 IAC 2-6 (Emission Reporting)</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>326 IAC 5-1 (Opacity Limitations)</td>
</tr>
<tr>
<td>This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).</td>
</tr>
<tr>
<td>326 IAC 6-4 (Fugitive Dust Emissions Limitations)</td>
</tr>
<tr>
<td>Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.</td>
</tr>
<tr>
<td>326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)</td>
</tr>
<tr>
<td>This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.</td>
</tr>
</tbody>
</table>
326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This source (located in Marion County) is located in one of the counties listed in 326 IAC 6.5, but is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. The source-wide PTE of PM is 10 tons per year or more. Therefore, this source is subject to the requirements of 326 IAC 6.5-1-2 because the source-wide actual emissions of PM can be 10 tons per year or more.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Marion County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

Degreasing operations (U1, U7 and Parts Washer):

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, these degreasing operations, identified as U1, U7 and Parts washer, were constructed after January 1, 1980, they are not subject to the requirements of 326 IAC 8-1-6 because U1 using solvents not containing VOC, U7 has unlimited VOC potential emissions less than twenty-five (25) tons per year, and parts washer has unlimited VOC potential emissions less than twenty-five (25) tons per year.

326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements)
The cold cleaner degreasing operations, identified as U1, are not subject to this rule because these operations are cold cleaning operations using solvents not containing VOC.

The degreasing operations, identified as parts washer and U7, are subject to this rule because these operations are cold cleaning operations using solvents containing VOC. The requirements of 326 IAC 8-3-2 apply to degreasing operations pursuant 326 IAC 8-3-1(c)(2)(A)(ii) because these degreasing operations were constructed after July 1, 1990 and are without remote solvent reservoirs. The Permittee shall comply with the 326 IAC 8-3-2 requirements for these degreasing operations.

326 IAC 8-3-8 (Material requirements for cold cleaner degreasers)
The degreasing operations, identified as U1, because these operations are cold cleaning operations using solvents not containing VOC.

The degreasing operations, identified as parts washer and U7, are subject to the provisions of 326 IAC 8-3-8 pursuant to 326 IAC 8-3-1(c)(3)(B), because this source is a user of solvents for use in cold cleaning degreasers and the solvent is not intended to be used to clean electronic components. The source does not sell solvents, therefore, the requirements of 326 IAC 8-3-8(b)(1) and 326 IAC 8-3-8(c)(1) do not apply to the degreasing operations. The Permittee shall comply with the 326 IAC 8-3-8(b)(2), (c)(2) and (d) requirements for the degreasing operations.

Buffing/Sanding/Polishing and Inert Gas Welding/Flame-Cutting Operation:

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. The buffing/sanding/polishing and inert gas welding/flame-cutting operations were not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the buffing/sanding and inert gas welding/flame-cutting operation shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), the buffing/sanding/polishing and inert gas welding/flame-cutting operation are not subject to the requirements of 326 IAC 6-3-2, since they are subject to the requirements of 326 IAC 6.5 which is more stringent.
Surface coating

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2(h), particulate emissions from the surface coating operation shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control devices in accordance with the manufacturer's specifications.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), the surface coating operation is not subject to the requirements of 326 IAC 6-3-2, since it is subject to the requirements of 326 IAC 6.5 which is more stringent.

326 IAC 8-1-6 (VOC Rules: New Facilities: General Reduction Requirements)
Pursuant to 326 IAC 8-1-6, the surface coating operation is not subject to the provisions of 326 IAC 8-1-6 because the VOC potential emissions for each facility is less than 25 tons per year.

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
Pursuant to 326 IAC 8-2-9, the potential to emit VOC is less than 15 pounds per day; therefore, the surface coating booths are not subject to this rule.

Robotic Polishing Operation, Chromium Electroplating and Nickel Plating

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. The robotic polishing operation, Chromium electroplating and Nickel plating were not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the robotic polishing operation, Chromium electroplating and Nickel plating shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(a), the requirements of 326 IAC 6-3-2 are applicable to the robotic polishing operation since it is a manufacturing process not exempted from this rule under 326 IAC 6-3-1(b) and is not subject to a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in this rule as specified in 326 IAC 6-3-1(c).

Based on the 326 IAC 6.5 limit of three-hundredths (0.03) grain per dry standard cubic foot (dscf) and flow rate of 4000 cfm, the PM emission limit will equate to 1.03 lb/hr (4.51 tons/year).

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Parts/hr</th>
<th>Part weight (lb)</th>
<th>P (ton/hr)</th>
<th>E (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP-A</td>
<td>50</td>
<td>1.5</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-B</td>
<td>50</td>
<td>1.5</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-C</td>
<td>50</td>
<td>1.5</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-D</td>
<td>50</td>
<td>1.5</td>
<td>0.025</td>
<td>0.551</td>
</tr>
<tr>
<td>RP-E</td>
<td>120</td>
<td>1.5</td>
<td>0.09</td>
<td>0.62</td>
</tr>
</tbody>
</table>

The limit in 326 IAC 6-3-2 is more stringent therefore the robotic polishing will be subject to 326 IAC 6.5 and 326 IAC 6-3-2.

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

\[
E = 4.10 P^{0.67}
\]

where \( E = \) rate of emission in pounds per hour and \( P = \) process weight rate in tons per hour
The baghouses shall be in operation at all times the polishing operation is in operation, in order to comply with this limit.

Pursuant to 326 IAC 6-3-1(c)(3), the Chromium electroplating and Nickel plating are not subject to the requirements of 326 IAC 6-3-2, since they are subject to the requirements of 326 IAC 6.5 which is more stringent.

**Natural Gas Combustion**

**326 IAC 6.5 (PM Limitations Except Lake County)**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5.

(a) Pursuant to 326 IAC 6.5-1-2(b)(3), particulate matter (PM) emissions from the natural gas boilers shall not exceed 0.01 grain per dry standard cubic foot (dscf).

(b) Pursuant to 326 IAC 6.5-1-2(b)(3), particulate matter (PM) emissions from the natural gas heaters and powder coating oven shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

**326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)**
Pursuant to 326 IAC 6-3-1(c)(3), the natural gas boilers and powder coating oven are not subject to the requirements of 326 IAC 6-3-2, since they are subject to the requirements of 326 IAC 6.5 which is more stringent.

**Natural gas fueled Emergency Generators**

**326 IAC 6.5 (PM Limitations Except Lake County)**
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. The natural gas fueled emergency generators were not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the natural gas fueled emergency generators usage shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

**326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)**
The natural gas fueled emergency generators are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) because, pursuant to 326 IAC 1-2-19, each emission unit does not meet the definition of an indirect heating unit.

**326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)**
Each natural gas fueled emergency generator is exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)**
This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from each unit is less than twenty-five (25) tons per year and ten (10) pounds per hour.

**326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)**
The natural gas fueled electric generators are not subject to the requirements of 326 IAC 8-1-6, since each has potential VOC emissions less than twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) per year.

**326 IAC 9-1-1 (Carbon Monoxide Emission Limits)**
The natural gas fueled electric generators are not subject to 326 IAC 9-1-1, because there are no applicable emission limits for the source under 326 IAC 9-1-2.
Powder Coating

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. The powder coating operation was not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the powder coating operation shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Miscellaneous Cleaner/Coating/Solvent Materials usage

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. The miscellaneous cleaner/coating/solvent materials usage were not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the miscellaneous cleaner/coating/solvent materials usage shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

326 IAC 8-1-6 (VOC Rules: New Facilities: General Reduction Requirements)
The miscellaneous materials usage is not subject to the provisions of 326 IAC 8-1-6 because the VOC potential emissions for the use of these materials are less than 25 tons per year.

Wet Machining Operations and Hinge Saw

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. The wet machining operations and hinge saw were not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the wet machining operations and hinge saw shall not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Compliance Determination and Monitoring Requirements

(a) The Compliance Monitoring Requirements applicable to this source are as follows:

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Type of Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>dust collectors</td>
<td>dust collectors inspections</td>
<td>Semi-annual</td>
<td>Verify that it is operated and maintained per manufacturer's specifications</td>
</tr>
<tr>
<td>dry filters</td>
<td>Dry Filter Inspections</td>
<td>Daily</td>
<td>Verify the placement, integrity and particle loading of the filters</td>
</tr>
<tr>
<td></td>
<td>Observations for stack overspray</td>
<td>Weekly</td>
<td>Verify if there is an overspray condition that should result in a response</td>
</tr>
<tr>
<td></td>
<td>Inspections for stack emissions and presence of overspray</td>
<td>Monthly</td>
<td>Verify if there is a noticeable change in overspray emissions or evidence of overspray</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the dust collectors for the buffing/sanding/polishing operation must operate properly to assure compliance with 326 IAC 6.5-1-2(a) Particulate Matter (PM).

These monitoring conditions are necessary because the dry filters for the HVLP surface coating spray booths must operate properly to assure compliance with 326 IAC 6.5-1-2(h) Particulate Matter (PM).
## Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 25, 2019. Additional information was received on May 7, 2019.

The construction of this proposed revision shall be subject to the conditions of the attached proposed New Source Review and MSOP Renewal No. 097-41387-00119.

The operation of this stationary security products manufacturing operation shall be subject to the conditions of the attached proposed MSOP Renewal No. 097-41387-00119.

The staff recommends to the Commissioner that the New Source Review and MSOP Renewal be approved.

## IDEM Contact

(a) If you have any questions regarding this permit, please contact Mena Mekhail, 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) 234-7434 or (800) 451-6027, and ask for Mena Mekhail or (317) 234-7434.

(b) A copy of the findings is available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](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 Air Permits page on the Internet at: [http://www.in.gov/idem/airquality/2356.htm](http://www.in.gov/idem/airquality/2356.htm); and the Citizens’ Guide to IDEM on the Internet at: [http://www.in.gov/idem/6900.htm](http://www.in.gov/idem/6900.htm).
<table>
<thead>
<tr>
<th>Unit Description</th>
<th>PM (ton/yr)</th>
<th>PM10 (ton/yr)</th>
<th>PM2.5 (ton/yr)</th>
<th>SO2 (ton/yr)</th>
<th>NOx (ton/yr)</th>
<th>VOC (ton/yr)</th>
<th>CO (ton/yr)</th>
<th>Total Combined HAPs (ton/yr)</th>
<th>Single Worst HAP (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degreasing Operations</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Buffing/Sanding/Polishing</td>
<td>35.34</td>
<td>35.34</td>
<td>35.34</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Chromium Electroplating</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.06</td>
<td>--</td>
</tr>
<tr>
<td>Nickel Plating</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.58</td>
<td>Nickel</td>
</tr>
<tr>
<td>Surface Coating</td>
<td>1.48</td>
<td>1.48</td>
<td>1.48</td>
<td>--</td>
<td>--</td>
<td>2.71</td>
<td>--</td>
<td>2.20</td>
<td>--</td>
</tr>
<tr>
<td>Robotic Polishing Operation</td>
<td>28.69</td>
<td>28.69</td>
<td>28.69</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Natural Gas Combustion</td>
<td>0.23</td>
<td>0.91</td>
<td>0.91</td>
<td>0.07</td>
<td>11.95</td>
<td>0.66</td>
<td>10.03</td>
<td>0.23</td>
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</tr>
<tr>
<td>Emergency Generators</td>
<td>1.29E-02</td>
<td>6.32E-03</td>
<td>6.32E-03</td>
<td>3.91E-04</td>
<td>1.51E+00</td>
<td>1.97E-02</td>
<td>2.33</td>
<td>2.11E-02</td>
<td>--</td>
</tr>
<tr>
<td>Welding/Flame Cutting</td>
<td>9.74E-02</td>
<td>9.74E-02</td>
<td>9.74E-02</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>7.69E-04</td>
<td>8.54E-05 Nickel</td>
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<tr>
<td>Powder Coating</td>
<td>20.93</td>
<td>20.93</td>
<td>20.93</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<td>Miscellaneous Materials</td>
<td>3.65E-03</td>
<td>3.65E-03</td>
<td>3.65E-03</td>
<td>--</td>
<td>--</td>
<td>1.66</td>
<td>--</td>
<td>0.49</td>
<td>--</td>
</tr>
<tr>
<td>Wet Machining Operations</td>
<td>9.46</td>
<td>9.46</td>
<td>9.46</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Hinge Saw</td>
<td>0.53</td>
<td>0.53</td>
<td>0.53</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>97.06</strong></td>
<td><strong>97.74</strong></td>
<td><strong>97.74</strong></td>
<td><strong>0.07</strong></td>
<td><strong>13.46</strong></td>
<td><strong>5.10</strong></td>
<td><strong>12.37</strong></td>
<td><strong>4.62</strong></td>
<td><strong>1.58 Nickel</strong></td>
</tr>
</tbody>
</table>

---

### Potential to Emit Summary

<table>
<thead>
<tr>
<th>Single Admission Limit (ton/yr)</th>
<th>1.58 Nickel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HAPs</td>
<td>13.46</td>
</tr>
<tr>
<td>CO</td>
<td>5.10</td>
</tr>
<tr>
<td>SO2</td>
<td>12.37</td>
</tr>
<tr>
<td>NOx</td>
<td>4.62</td>
</tr>
<tr>
<td>VOC</td>
<td>0.07</td>
</tr>
<tr>
<td>PM10</td>
<td>97.74</td>
</tr>
<tr>
<td>PM2.5</td>
<td>97.74</td>
</tr>
<tr>
<td>PM</td>
<td>97.06</td>
</tr>
</tbody>
</table>
### New Units:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10*</th>
<th>PM2.5*</th>
<th>SO₂</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Worst Single HAP (Hexane)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parts Washer (M2750)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.88E-03</td>
<td>0.00</td>
</tr>
<tr>
<td>Robotic Polishing Operation (RP-E)</td>
<td>10.76</td>
<td>10.76</td>
<td>10.76</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Hinge Saw</td>
<td>0.53</td>
<td>0.53</td>
<td>0.53</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total PTE of new unit</strong></td>
<td>11.29</td>
<td>11.29</td>
<td>11.29</td>
<td>0.00</td>
<td>0.00</td>
<td>2.88E-03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Appendix A: Emission Calculations
Robotic Polishing Operation

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M097-41387-00119
Reviewer: Mena Mekhail

Total Input Rate: 400 (lb/5 week operation)
Parts per hour: 19740 (lb/5 week operation)
Control Efficiency (percent): 99%

Dust Collector Information (assuming all collections are PM/PM10/PM2.5)

<table>
<thead>
<tr>
<th>Robot Polishing Unit ID</th>
<th>Input Rate (parts/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>120</td>
</tr>
</tbody>
</table>

Captured PM/PM10 (lb/part) = PM/PM10/PM2.5 Collected by Dust Collector (lb/5 wk operation) / Operational Throughput (parts/5 wk operation)
= 400 (lb/5 wk operation) / 19740 (parts/5 wk operation)
= 2.03E-02 lb/part PM/PM10/PM2.5 collected

Captured PM/PM10 (lb/part) = Total Uncontrolled PM/PM10/PM2.5 (lb/part) x Capture Efficiency

Uncontrolled PM/PM10 (lb/part PM10 collected) = Captured PM/PM10/PM2.5 (lb/part) / Capture Efficiency
= 0.0203 (lb/part) / 0.99
= 0.205E-02 lb/part

Uncontrolled PM/PM10 from Robotic Polishing Operation

Uncontrolled PM/PM10/PM2.5 (ton/yr) = Total Input Rate (part/hr) x Uncontrolled PM/PM10/PM2.5 (lb/part) / 2000(lb/ton) x 8760 (hr/yr)
= parts/hr x 0.0205 (lb/part) x 8760 (hr/yr)/2000 (lb/ton)
= 10.76 ton/yr

Controlled PM/PM10/PM2.5 from Buffing Sanding and Polishing Operations

Controlled PM/PM10/PM2.5 (lb/ton) = Uncontrolled PM/PM10/PM2.5 (ton/yr) x 1 - Control Efficiency
= 2.11 (ton/yr) x (1 - 0.99)
= 0.108 ton/yr
Appendix A: Emission Calculations
Degreasing Operations

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M097-41387-00119
Reviewer: Mena Mekhail

<table>
<thead>
<tr>
<th>Compound</th>
<th>Maximum Usage</th>
<th>Density</th>
<th>%VOC by Weight</th>
<th>% Emitted</th>
<th>VOC/HAP Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gal/yr</td>
<td>gal/day</td>
<td>lbs/gal</td>
<td>%VOC/HAP by Weight</td>
<td>% Emitted</td>
</tr>
<tr>
<td>Bio-circle</td>
<td>5,200</td>
<td>14.25</td>
<td>8.34</td>
<td>0.00%</td>
<td>20%</td>
</tr>
<tr>
<td>M2750 Cleaner</td>
<td>360</td>
<td>0.99</td>
<td>8.34</td>
<td>0.96%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Multiple units that utilize Bio-Circle product and one (1) unit that uses M2750 Cleaner.
** Upto 20% of product is estimated to be lost due to direct evaporation from units or carryout.

Methodology
VOC emission rate (tons/yr) = Material Usage (gals/yr) * Desity (lbs/gal) * Weight % VOC * % Emitted * 1 ton/2000 lbs

<table>
<thead>
<tr>
<th>Compound *</th>
<th>Maximum Usage</th>
<th>Density</th>
<th>%VOC/HAP by Weight</th>
<th>% Emitted</th>
<th>VOC/HAP Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gal/yr</td>
<td>gal/day</td>
<td>lbs/gal</td>
<td>%VOC/HAP by Weight</td>
<td>% Emitted</td>
</tr>
<tr>
<td>N-Propyl Bromide</td>
<td>832</td>
<td>2.28</td>
<td>11.022</td>
<td>100.00%</td>
<td>1%</td>
</tr>
<tr>
<td>M6386</td>
<td>832</td>
<td>2.28</td>
<td>7.344</td>
<td>100.00%</td>
<td>1%</td>
</tr>
</tbody>
</table>

* Only one solvent will be used at a time. Therefore, worst case Product emissions are used to estimate PTE.
VOC/HAP percentage from MSDS supplied by the source.

Methodology
VOC emission rate (tons/yr) = Material Usage (gals/yr) * Desity (lbs/gal) * Weight % VOC * % Emitted * 1 ton/2000 lbs
Appendix A: Emission Calculations
Buffing/Sanding/Polishing

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M097-41387-00119
Reviewer: Mena Mekhail

Total Input Rate (pounds per hour) = 380.0

PM/PM10/PM2.5 Collected by Dust Collector (lbs) = 59,978 lbs
Operational Throughput (lbs) = 2,882,302 lbs
Control Efficiency (Percent) = 98%

<table>
<thead>
<tr>
<th>Stations</th>
<th>Total Parts/Hr</th>
<th>wt/part (lbs)</th>
<th>throughput (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>40</td>
<td>760</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Dust Collections Information (assuming all collections are PM/PM10)

Captured PM/PM10/PM2.5 (lb/ton) = PM/PM10/PM2.5 Collected by Dust Collector (lb)/Operational Throughput (lb)

\[ \text{Captured PM/PM10/PM2.5 (lb/ton)} = \frac{59,978 \text{ (lb)}}{2,882,302 \text{ (lb) x 2000 (lb/ton)}} \]

\[ = 41.62 \text{ lb/ton} \]

Total Uncontrolled PM/PM10/PM2.5 (lb/ton) = Captured PM/PM10/PM2.5 (lb/ton) x Capture Efficiency

\[ = 41.62 \text{ (lb/ton)} \times 0.98 \]

\[ = 42.47 \text{ lb/ton} \]

Uncontrolled PM/PM10 from Buffing Sanding and Polishing Operations

\[ \text{Uncontrolled PM/PM10/PM2.5 (ton/yr)} = \text{Total Input Rate (lb/hr) x Uncontrolled PM/PM10/PM2.5 (lb/ton) / 2000 (lb/ton) x 8760 (hr/yr) / 2000 (lb/ton)} \]

\[ = 380\text{ (lb/hr) x 42.47 (lb/ton) / 2000 (lb/ton) x 8760 (hr/yr) / 2000 (lb/ton)} \]

\[ = 35.34 \text{ ton/yr} \]

Controlled PM/PM10 from Buffing Sanding and Polishing Operations

\[ \text{Controlled PM/PM10/PM2.5 (ton/yr)} = \text{Uncontrolled PM/PM10/PM2.5 (ton/yr) x 1 - Control Efficiency} \]

\[ = 35.34 \text{ (ton/yr) x (1 - 0.98)} \]

\[ = 0.71 \text{ ton/yr} \]
Appendix A: Emission Calculations
Chromium Electroplating

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M097-41387-00119
Reviewer: Mena Mekhail

Total Rectifier Capacity
Amps

3000.0

<table>
<thead>
<tr>
<th></th>
<th>PM*</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in grains/A-hr</td>
<td>0.069</td>
<td>0.033</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>0.13</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Total PM includes filterable and condensible PM. All PM is likely to be emitted as PM10.

Methodology

Emission Factors are from AP 42, Chapter 12.20, Table 12.20-1.
Emission (tons/yr) = Capacity (amps) x Emission Factor (gr/A-hr) x 8760 hr/yr x lb/7000 gr x ton/2,000 lb
Appendix A: Emission Calculations
Nickel Plating

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M097-41387-00119
Reviewer: Mena Mekhail

Total Rectifier Capacity
Amps

<table>
<thead>
<tr>
<th>PM*</th>
<th>Nickel</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.069</td>
<td>0.63</td>
</tr>
<tr>
<td>0.17</td>
<td>1.58</td>
</tr>
</tbody>
</table>

*Total PM includes filterable and condensible PM. All PM is likely to be emitted as PM10.

Methodology

Emission Factors are from AP 42, Chapter 12.20, Table 12.20-1 and 12.20-4.

Emission (tons/yr) = Capacity (amps) x Emission Factor (gr/A-hr) x 8760 hr/yr x lb/7000 gr x ton/2,000 lb
### Appendix A: Emissions Calculations From Surface Coating Operations

#### Methodology

Hazardous air pollutants (HAP) is defined by Section 112(b) of the Clean Air Act. PTE of Total HAPs (tons/year) = SUM (PTE of Each Single HAP (tons/year))

#### Pounds VOC per gallon of coating solids

Pounds VOC per gallon coating = [Density (lbs/gal)] * [Weight % VOC] / [Volume % Solids]

Pounds VOC per gallon coating less water and exempt Compounds = [Density (lbs/gal)] * [Weight % VOC] / [1 - (Volume % water and exempt Compounds)]

#### Maximum Material Usage (gal/day)

Maximum Material Usage (gal/day) = [Maximum Material Usage (gal/unit)] * [Maximum Capacity (units/hour)] * [24 hours/day]

#### Weight % VOC

Weight % VOC = [Weight % Volatile (water, VOC, and exempt Compounds*)] - [Weight % water and exempt Compounds]

*Exempt compounds include all compounds specifically exempted from the definition of volatile organic compounds (VOC) under 40 CFR 51.100(s).

#### Material

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Maximum Material Usage (gal/unit)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Weight % Water</th>
<th>Weight % Solids</th>
<th>Weight % Formic Acid</th>
<th>Weight % Ethyl Benzene</th>
<th>Weight % Methylene Chloride</th>
<th>Weight % Acetone</th>
<th>Weight % Isopropanol</th>
<th>Weight % Methyl Ethyl Ketone</th>
<th>Weight % Xylene</th>
<th>Weight % Toluene</th>
<th>Weight % Ethanol</th>
<th>Pounds of VOC (tons/year)</th>
<th>Pounds of PM/PM10/PM2.5 (tons/year)</th>
<th>Pounds of Glycol Ether (tons/year)</th>
<th>PTE of VOC (tons/year)</th>
<th>PTE of PM/PM10/PM2.5 (tons/year)</th>
<th>PTE of Glycol Ether (tons/year)</th>
<th>Total HAP (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexane</td>
<td>0.72</td>
<td>0.21</td>
<td>0.00</td>
<td>9.53%</td>
<td>81.72%</td>
<td>39.30%</td>
<td>14.11%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>8.13%</td>
<td>70.00%</td>
<td>40.00%</td>
<td>0.14%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.001</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
<td>81.72%</td>
<td>39.30%</td>
<td>14.11%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>8.13%</td>
<td>70.00%</td>
<td>40.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Methanol</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
<td>81.72%</td>
<td>39.30%</td>
<td>14.11%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>8.13%</td>
<td>70.00%</td>
<td>40.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
<td>81.72%</td>
<td>39.30%</td>
<td>14.11%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>8.13%</td>
<td>70.00%</td>
<td>40.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

**Note:** Multiple coatings and paints are used. These represent the worst case for each pollutant.

#### Controlled PTE of PM/PM10/PM2.5 (tons/year) = [Uncontrolled PTE of PM/PM10/PM2.5 (tons/year)] * [1 - Control Efficiency]

Control Efficiency = [1 - [Pounds of VOC per gallon coating less water and exempt Compounds / Pounds of VOC per gallon coating]]

Uncontrolled PTE of PM/PM10/PM2.5 (tons/year) = [Density (lbs/gal)] * [Maximum Material Usage (gal/unit)] * [Maximum Capacity (units/hour)] * [1 - Weight % Volatile] * [1 - Transfer Efficiency] * [8760 hour/year] * [1 ton/2000 lbs]

PTE of VOC (tons/year) = [PTE of VOC (lbs/hour)] * [8760 hours/year] * [1 ton/2000 lbs]

PTE of VOC (lbs/hour) = [Maximum Material Usage (gal/unit)] * [Maximum Capacity (units/hour)] * [Pounds of VOC per gallon coating less water and exempt Compounds]

Pounds of VOC per gallon coating less water and exempt Compounds = [Density (lbs/gal)] * [Weight % VOC] / [1 - (Volume % water and exempt Compounds)]

Total HAP (tons/year) = SUM (PTE of Each Single HAP (tons/year))

Company Name: Dormakaba USA Inc.
Source Address: 5140 East 75th Street, Indianapolis, IN 46250

Permit Number: M097-01387-00119

Reviewer: Mena Mekhail

Source Address: 6161 East 75th Street, Indianapolis, IN 46250
Company Name: Dormakaba USA Inc.

Permit Number: M097-41387-00119

Reviewer: Mena Mekhail

Source: Dormakaba USA Inc.

Volume % Solids

Formaldehyde

9.53

50%

0.21

0.00

Hexane

0.001

0.00%

81.72%

39.30%

14.11

0.41

0.00%

Toluene

34.00%

0.0009

Weight %

Methanol

7.00%

6.05

4.80

0.00

13.00%

3.81

70.000

0.14

0.00

0.98

4.80

0.00%

1.12

39.30%

0.00%

0.00%

0.00%

0.00%

0.00%

0.72

0.75

0.00%

40.00%

1.48

8.00

0.28

Weight %

0.00%

8.13

70.000

6.05

0.19

0.34

10.00%

7.00%

1.404

1.344

7.40

Methanol

Toluene

0.00%

1.344

40.00%

1.08

8.00

1.23

0.00

0.00

0.00%

0.00%

0.00%

0.00%

0.94

0.17

0.00%

5.35

8.00

Weight %

65.000

70.00

3.81

0.00

0.22

0.00

10.00%

Hexane

0.13

Ethyl-Benzene

0.0008

Weight %

0.00%

50%

46.52

Weight %

0.00%

50%

0.20

0.0008

Glycol Ethers

40.00%

6.74

3.81

60.00

59.97%

5.12

Total HAPs

9.53

0.21

0.00

0.00

0.00

0.00

0.00

2.20
Appendix A: Emission Calculations
Robotic Polishing Operation

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M007-41397-00119
Reviewer: Mena Mekhail

Total Input Rate = 400 (lb/5 week operation)
Parts per hour = 320.0
Operational Throughput = 19740 (lb/5 week operation)
Control Efficiency (percent) = 99%

Dust Collector Information (assuming all collections are PM/PM10/PM2.5)

<table>
<thead>
<tr>
<th>Robot Polishing Unit ID</th>
<th>Input Rate (parts/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP-A</td>
<td>50</td>
</tr>
<tr>
<td>RP-B</td>
<td>50</td>
</tr>
<tr>
<td>RP-C</td>
<td>50</td>
</tr>
<tr>
<td>RP-D</td>
<td>50</td>
</tr>
<tr>
<td>RP-E</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>320</td>
</tr>
</tbody>
</table>

Captured PM/PM10/PM2.5 (lb/part) = PM/PM10/PM2.5 Collected by Dust Collector (lb/5 wk operation) / Operational Throughput (parts/5 wk operation)

= 400 (lb/5 wk operation) / 19740 (parts/5 wk operation)

= 2.03E-02 lb/part PM/PM10 collected

Captured PM/PM10/PM2.5 (lb/part) = Total Uncontrolled PM/PM10/PM2.5 (lb/part) x Capture Efficiency

= 0.0203 (lb/part) / 0.99

= 2.05E-02 lb/part

Uncontrolled PM/PM10 from Robotic Polishing Operation

Uncontrolled PM/PM10/PM2.5 (ton/yr) = Total Input Rate (part/hr) x Uncontrolled PM/PM10/PM2.5 (lb/part) / 2000(lb/ton) x 8760 (hr/yr)

= 23.5 (parts/hr) x 0.0205 (lb/part) x 8760 (hr/yr)/2000 (lb/ton)

= 28.69 ton/yr

Controlled PM/PM10/PM2.5 from Buffing Sanding and Polishing Operations

Controlled PM/PM10/PM2.5 (lb/ton) = Uncontrolled PM/PM10/PM2.5 (ton/yr) x 1 - Control Efficiency

= 2.11 (ton/yr) x (1 - 0.99)

= 0.287 ton/yr
### Appendix A: Emissions Calculations

#### Natural Gas Combustion Only

**Company Name:** Dormakaba USA Inc.  
**Address City IN Zip:** 6161 East 75th Street, Indianapolis, IN 46250  
**Permit Renewal No.:** M097-41387-00119  
**Reviewer:** Mena Mekhail

#### Natural Gas Emission Units

<table>
<thead>
<tr>
<th>Natural Gas Emission Units</th>
<th>Total Number of</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000 Boiler Room - A</td>
<td>1</td>
<td>1.99</td>
</tr>
<tr>
<td>3000 Boiler Room - B</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Rating 1000</td>
<td>1</td>
<td>2.05</td>
</tr>
<tr>
<td>Water Heaters (c)</td>
<td>3</td>
<td>0.92</td>
</tr>
<tr>
<td>Powder Coat Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heaters/ Ovens (i)</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Space heaters (p)</td>
<td>31</td>
<td>7.16</td>
</tr>
<tr>
<td>Hartzell Air Make-up Units (q)</td>
<td>4</td>
<td>10.0</td>
</tr>
</tbody>
</table>

#### Heat Input Capacity

<table>
<thead>
<tr>
<th>Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
</tr>
<tr>
<td>PM10*</td>
</tr>
<tr>
<td>direct PM2.5*</td>
</tr>
<tr>
<td>SO2</td>
</tr>
<tr>
<td>NOx</td>
</tr>
<tr>
<td>VOC</td>
</tr>
<tr>
<td>CO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>PM*</th>
<th>PM10*</th>
<th>direct PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>0.23</td>
<td>0.91</td>
<td>0.91</td>
<td>0.07</td>
<td>11.95</td>
<td>0.66</td>
<td>10.03</td>
</tr>
</tbody>
</table>

*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/1,020 MMBtu  
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

#### Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>HAPs - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
</tr>
<tr>
<td>Dichlorobenzene</td>
</tr>
<tr>
<td>Formaldehyde</td>
</tr>
<tr>
<td>Hexane</td>
</tr>
<tr>
<td>Toluene</td>
</tr>
<tr>
<td>Total - Organics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMcf</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1E-03</td>
<td>2.1E-03</td>
</tr>
<tr>
<td>1.2E-03</td>
<td>1.2E-03</td>
</tr>
<tr>
<td>7.5E-02</td>
<td>7.5E-02</td>
</tr>
<tr>
<td>1.8E+00</td>
<td>1.8E+00</td>
</tr>
<tr>
<td>3.4E-03</td>
<td>3.4E-03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAPs - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
</tr>
<tr>
<td>Cadmium</td>
</tr>
<tr>
<td>Chromium</td>
</tr>
<tr>
<td>Manganese</td>
</tr>
<tr>
<td>Nickel</td>
</tr>
<tr>
<td>Total - Metals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMcf</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0E-04</td>
<td>5.0E-04</td>
</tr>
<tr>
<td>1.1E-03</td>
<td>1.1E-03</td>
</tr>
<tr>
<td>1.4E-03</td>
<td>1.4E-03</td>
</tr>
<tr>
<td>3.8E-04</td>
<td>3.8E-04</td>
</tr>
<tr>
<td>2.1E-03</td>
<td>2.1E-03</td>
</tr>
</tbody>
</table>

Methodology is the same as above.  
The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
Appendix A: Emission Calculations

Emergency Generators - #1 and #3

Company Name: Dormakaba USA Inc.
Address City IN Zip: 6161 East 75th Street, Indianapolis, IN 46250
Permit Renewal No.: M097-41387-00119
Reviewer: Mena Mekhail

Emergency Natural Gas IC Engine Generators
Generator 1 - 60 KW (260 HP)
Generator 3 - 130 KW (260 HP)

Rich Burn Natural Gas IC Engine emission factors
AP-42 Section 3.2, Table 3.2-3 (7/00)

<table>
<thead>
<tr>
<th>Total Generator Capacity</th>
<th>190 KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Power Output of Nat Gas IC Engines:</td>
<td>380 hp</td>
</tr>
<tr>
<td>Brake Specific Fuel Combustion factor:</td>
<td>7,000 Btu/hp-hr*</td>
</tr>
<tr>
<td>Maximum Projected Engine run hours per day:</td>
<td>24 hr/day</td>
</tr>
<tr>
<td>Maximum Projected Engine run hours per year:</td>
<td>500 hrs/yr</td>
</tr>
<tr>
<td>Heating Value of Nat Gas fuel:</td>
<td>1,020 Btu/scf</td>
</tr>
</tbody>
</table>

Total input/output:

<table>
<thead>
<tr>
<th>BTU input/ hp-hr Output:</th>
<th>Max Hourly</th>
<th>2.86</th>
<th>MMBtu/hr fuel input</th>
<th>380.0 hp-hr output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max Daily</td>
<td>63.8</td>
<td>MMBtu/hr fuel input</td>
<td>9,120 hp-hr output</td>
</tr>
<tr>
<td></td>
<td>Max Annual</td>
<td>1,330</td>
<td>MMBtu/hr fuel input</td>
<td>190,000 hp-hr output</td>
</tr>
</tbody>
</table>

Maximum hourly heat input: 2.66 MMBtu/hr
Maximum Hourly Natural Gas Usage: 2607.8 scf/hr
Maximum Daily Natural Gas Usage: 62588.2 scf/day
Maximum Annual Natural Gas Usage: 1,303,922 scf/yr

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>AP-42 Emission Factors</th>
<th>Maximum Projected Emissions ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/1.00E5 Btu</td>
<td>lb/hr</td>
</tr>
<tr>
<td>Criteria Pollutants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td>0.019</td>
<td>0.052</td>
</tr>
<tr>
<td>PM10</td>
<td>0.010</td>
<td>0.025</td>
</tr>
<tr>
<td>SOx</td>
<td>5.88E-04</td>
<td>1.56E-03</td>
</tr>
<tr>
<td>NOx</td>
<td>2.27</td>
<td>6.04</td>
</tr>
<tr>
<td>VOC (TOC)</td>
<td>0.030</td>
<td>0.079</td>
</tr>
<tr>
<td>CO</td>
<td>3.51</td>
<td>9.34</td>
</tr>
</tbody>
</table>

** Emission Calculations provided by the source.

¹ Projected emissions based on maximum projected run time of 500 hours per year
This unit only runs in the event of a power outage or in order to perform preventative maintenance/ testing
Conversion factor per AP-42 table 3.3-1 footnote

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>AP-42 Emission Factors</th>
<th>Maximum Projected Emissions ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/1.00E5 Btu</td>
<td>lb/hr</td>
</tr>
<tr>
<td>HAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,1,2,2-tetrachloroethane</td>
<td>2.53E-05</td>
<td>0.00007</td>
</tr>
<tr>
<td>1,3-Butadiene</td>
<td>6.63E-04</td>
<td>0.00176</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>2.79E-03</td>
<td>0.00742</td>
</tr>
<tr>
<td>Acrolein</td>
<td>2.63E-03</td>
<td>0.00700</td>
</tr>
<tr>
<td>Benzene</td>
<td>1.56E-03</td>
<td>0.00420</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>2.05E-02</td>
<td>0.05453</td>
</tr>
<tr>
<td>PAA</td>
<td>1.41E-04</td>
<td>0.00038</td>
</tr>
<tr>
<td>Toluene</td>
<td>5.58E-04</td>
<td>0.00148</td>
</tr>
<tr>
<td>Xylenes</td>
<td>1.95E-04</td>
<td>0.00052</td>
</tr>
<tr>
<td>Propylene</td>
<td>2.58E-03</td>
<td>0.00686</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>4.12E-05</td>
<td>0.00011</td>
</tr>
</tbody>
</table>

** Emission Calculations provided by the source.

¹ Projected emissions based on maximum projected run time of 500 hours per year
This unit only runs in the event of a power outage or in order to perform preventative maintenance/ testing
Conversion factor per AP-42 table 3.3-1 footnote

Total HAP: 0.02108
## Appendix A: Emissions Calculations
### Powder Coating

**Company Name:** Dormakaba USA Inc.  
**Address:** 6161 East 75th Street, Indianapolis, IN 46250  
**MSOP Renewal:** M097-41387-00119  
**Reviewer:** Mena Mekhail

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Max. Throughput Rate (lbs/hr)</th>
<th>Capture Efficiency (CapE) (%)</th>
<th>Transfer Efficiency (TE) (%)</th>
<th>* PTE PM/PM10/PM2.5 Before Control (tons/year)</th>
<th>Control Efficiency (CE) (%)</th>
<th>* PTE of PM/PM10 After Control (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder Coating</td>
<td>7.35</td>
<td>100%</td>
<td>35%</td>
<td>20.9</td>
<td>99.9%</td>
<td>0.021</td>
</tr>
</tbody>
</table>

*Assume all PM emissions are equal to PM10 emissions

**Maximum Annual Rated Capacity** 8,760 hrs/year

**METHODOLOGY**

PTE before control PM/PM10 (tons/year) = Maximum Throughput Rate (lb/hour) * (CapE * (1-TE) + (1-CapE)) * Maximum Annual Rated Capacity (hrs/year) * 1 ton/2000 lbs  

PTE after control PM/PM10 (tons/year) = PTE before Control (tons/year) * (1-CE)
## Appendix A: Emission Calculations
### Welding/Flame Cutting

**Company Name:** Dormakaba USA Inc.  
**Address City IN Zip:** 6161 East 75th Street, Indianapolis, IN 46250  
**Permit Renewal No.:** M097-41387-00119  
**Reviewer:** Mena Mekhail

### Metal Inert Gas (MIG) (carbon steel)

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>Number of Stations</th>
<th>Maximum electrode consumption per station (lbs/hr)</th>
<th>EMISSION FACTORS* (lb pollutant/lb electrode)</th>
<th>EMISSIONS (lbs/hr)</th>
<th>HAPS (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELDING</td>
<td></td>
<td></td>
<td>PM/PM10/PM2.5 Mn Ni Cr PM/PM10/PM2.5 Mn Ni Cr Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal Inert Gas (MIG) (carbon steel)</td>
<td>1</td>
<td>0.06</td>
<td>0.0055 0.0005 0.0001 0.0003</td>
<td>3.30E-04 3.00E-05 6.00E-06 1.80E-05</td>
<td>0.000054</td>
</tr>
</tbody>
</table>

### Oxyacetylene

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>Number of Stations</th>
<th>Maximum Metal consumption per station (lbs/hr)</th>
<th>EMISSION FACTORS* (lb pollutant/1,000 inches cut, 1&quot; thick)**</th>
<th>EMISSIONS (lbs/hr)</th>
<th>HAPS (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAME CUTTING</td>
<td></td>
<td></td>
<td>PM/PM10/PM2.5 Mn Ni Cr PM/PM10/PM2.5 Mn Ni Cr Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxyacetylene</td>
<td>1</td>
<td>1.125</td>
<td>2</td>
<td>0.1622 0.0005 0.0001 0.0003</td>
<td>2.19E-02 6.75E-05 1.35E-05 4.05E-05</td>
</tr>
</tbody>
</table>

**POTENTIAL EMISSION TOTALS**

- **Emissions, lbs/day:** 0.533448, 0.00234, 0.000468, 0.001404, 0.004212
- **Emissions, tons/yr:** 0.09735426, 0.00043, 0.000083, 0.0002562, 0.000769

### Methodology

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.
## Emission Calculations

### Miscellaneous Cleaner-Coating-Solvent Usage

**Company Name:** Dormakaba USA Inc.
**Address City Zip:** 611 East 75th Street, Indianapolis, IN 46250
**Permit Renewal No.:** M007-41387-00119
**Reviewer:** Mena Mekhail

### Appendix A: Emission Calculations

### Product (Coating / Material) | Estimated Annual Usage (number of Containers Used) | Container Size (Converted to gal) | Estimated Annual Usage (gal) | Associated Annual Operating Hours | Est. Max Annual Potential Usage (gall/yr) @ 8760 hr/yr | Product Density (Lb/Gal) | Wt % Volatile (Incl. W, ES & VOC) | Wt % Water & Exempt Solvents (ES) | Wt % VOC | Voc % W/E & Voc % Solids | VOC (lb/gal) | VOC PTE (lb/hr) | PTE VOC (Max ton/yr) | PM10/PM2.5 (lb/ton) | PM10/PM2.5 (lb/ton) | Trans. Eff. | Method of Application & Surface, If Applicable
Windex Glass Cleaner | 0.125 | 25.5 | 3500 | 84.4 | 8.33 | 100.00% | 93% | 7.00% | 93% | 0.00% | 8.33 | 0.88 | 0.0043 | 0.103 | 0.019 | Metal
Loctite 224 | 0.066 | 7.7 | 3500 | 4.3 | 8.18 | 4.48% | 5% | 4.48% | 5% | 95.56% | 0.41 | 0.41 | 0.0022 | 0.006 | 0.001 | NA
Loctite 495 Super Bonder Adhesive | 0.038 | 3.86 | 3500 | 2.2 | 9.16 | 1.82% | 0% | 1.82% | 0% | 98.18% | 0.17 | 0.17 | 0.0000 | 0.001 | 0.000 | NA
Imperial Aircraft 90 % | 0.156 | 7.48 | 3500 | 18.5 | 3.75 | 100.00% | 33% | 10.00% | 33% | 0.00% | 7.75 | 2.63 | 0.0156 | 0.079 | 0.051 | NA
Formica 800 Industrial | 0.156 | 1.95 | 3500 | 144.7 | 7.16 | 1.00% | 0% | 1.00% | 0% | 99.99% | 0.07 | 0.07 | 0.0118 | 0.284 | 0.052 | NA
Cologne XMR CleanUp Solvent | 0.156 | 7.12 | 3500 | 7.12 | 8.18 | 100.00% | 0% | 100.00% | 0% | 0.00% | 8.16 | 8.16 | 0.0020 | 0.736 | 0.031 | NA
Dintel LADD | 0.008 | 9.00 | 3500 | 96.5 | 9.83 | 45.00% | 25% | 20% | 25% | 55.90% | 2.35 | 2.37 | 0.0100 | 0.460 | 0.004 | NA
PAC Resin | 0.156 | 13.0 | 3500 | 25.3 | 9.83 | 50.00% | 40% | 10% | 40% | 50.00% | 1.47 | 1.46 | 0.0025 | 0.061 | 0.011 | NA
Loctite 4711 | 0.008 | 3.12 | 3500 | 3.12 | 9.16 | 0.85% | 0% | 0.85% | 0% | 99.18% | 0.16 | 0.08 | 0.0000 | 0.001 | 0.000 | NA
Ammonia Penetrating Oil | 0.100 | 11.0 | 3500 | 75.5 | 7.33 | 60.00% | 0% | 60.00% | 0% | 40.00% | 4.36 | 4.36 | 0.0382 | 3.317 | 0.605 | NA
Acrylam Steel Blue Layout Fluid | 0.156 | 7.5 | 3500 | 1.9 | 7.68 | 95.00% | 0% | 95.00% | 0% | 4.41% | 6.77 | 2.77 | 0.0015 | 0.035 | 0.000 | NA
Acrylam Steel Red Layout Fluid | 0.125 | 7.5 | 3500 | 1.9 | 7.68 | 95.00% | 0% | 95.00% | 0% | 4.41% | 6.77 | 2.77 | 0.0015 | 0.035 | 0.000 | NA
Product Resistant Cleaner Degreaser | 0.006 | 7.6 | 3500 | 7.6 | 8.25 | 95.00% | 71% | 10.00% | 71% | 9.00% | 4.27 | 1.24 | 0.0011 | 0.027 | 0.005 | NA
Ensigno B-580 Non Chromated Degreaser | 0.156 | 24.96 | 3500 | 62.5 | 5.62 | 100.00% | 0% | 100.00% | 0% | 0.00% | 5.62 | 5.62 | 0.0401 | 0.962 | 0.176 | NA
Sprayway Spray Adhesive | 0.156 | 3.12 | 3500 | 9.16 | 9.16 | 50.00% | 0% | 91.00% | 0% | 9.00% | 8.34 | 8.34 | 0.0056 | 0.134 | 0.024 | NA
Breiz Zinc Rich Coating Aerosol | 0.156 | 7.5 | 3500 | 7.5 | 8.25 | 95.00% | 71% | 10.00% | 71% | 9.00% | 4.27 | 1.24 | 0.0011 | 0.027 | 0.005 | NA
Armco Stainless Steel Metal Cleaner | 0.004 | 4.39 | 3500 | 108.6 | 7.13 | 100.00% | 0% | 100.00% | 0% | 0.00% | 7.13 | 7.13 | 0.0000 | 0.000 | 0.000 | NA

**Totals:** 219.0 | 2.16 | 1.6 | 3.4E-04 | 2.0E-02 | 1.6E-03

### Methodology

Pounds of VOC per Gallon Coating = Pounds of VOC per Gallon Coating + Potential VOC Pounds per Hour = Potential VOC Pounds per Day = Potential VOC Tons per Year = Particulate Potential Tons per Year = Pounds VOC per Gallon of Solids = (Density (lb/gal) * Water % (weight % organic)) / (Volume % solids)
Pounds VOC per Gallon of Solids = (Density (lb/gal) * Weight % organic) / (Volume % solids)

### Potential to Emit HAPs

<table>
<thead>
<tr>
<th>Product (Coating / Material)</th>
<th>Wt. % Glycol Ethers</th>
<th>Glycol Ether (lbr/yr)</th>
<th>Wt. % Cumene</th>
<th>Cumene (lbr/yr)</th>
<th>Wt. % 1,1- Trichloro-ethane</th>
<th>1,1- Trichloro-ethane (lbr/yr)</th>
<th>Wt. % Ethylbenzene</th>
<th>Ethylbenzene (lbr/yr)</th>
<th>Wt. % Xylene</th>
<th>Xylene (lbr/yr)</th>
<th>Wt. % Toluene</th>
<th>Toluene (lbr/yr)</th>
<th>Toluene (ton/yr)</th>
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<tbody>
<tr>
<td>Loctite XMR CleanUp Solvent</td>
<td>0.00</td>
<td>10.00</td>
<td>0.002</td>
<td>0.002</td>
<td>0.001</td>
<td>0.001</td>
<td>0.002</td>
<td>0.001</td>
<td>0.002</td>
<td>0.001</td>
<td>0.002</td>
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<td>spray</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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**Total HAPs =** 0.49  
**Worst Single HAP =** 0.01

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*Page 14 of 16, TSD App. A*
### PM Emissions Calculations from Wet Machining

<table>
<thead>
<tr>
<th>WC/Department #</th>
<th>Brand/Manufacturer</th>
<th>Type/ Machine Description</th>
<th>Number of wet machines</th>
<th>Air flow per unit (acfm)</th>
<th>Uncontrolled Emissions</th>
<th>Control efficiency (%)</th>
<th>Controlled Emissions</th>
<th>Potential Operation (hrs/year)</th>
<th>PM/PM10/PM2.5</th>
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<tbody>
<tr>
<td></td>
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<td>Broach - Horizontal</td>
<td>1</td>
<td>1,000</td>
<td>0.0090</td>
<td>0.077</td>
<td>80</td>
<td>0.0018</td>
<td>0.0154</td>
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<tr>
<td></td>
<td></td>
<td>Broach - Horizontal</td>
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<td>0.0090</td>
<td>0.077</td>
<td>80</td>
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<tr>
<td>15</td>
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<td>Rotary Transfer Cam Driven</td>
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<td>1,000</td>
<td>0.0090</td>
<td>0.077</td>
<td>80</td>
<td>0.0018</td>
<td>0.0154</td>
</tr>
<tr>
<td>15</td>
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<td>Rotary Transfer Cam Driven</td>
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<td>1,000</td>
<td>0.0090</td>
<td>0.077</td>
<td>80</td>
<td>0.0018</td>
<td>0.0154</td>
</tr>
<tr>
<td>15</td>
<td>Mikron</td>
<td>Rotary Transfer Cam Driven</td>
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<td>1,000</td>
<td>0.0090</td>
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<td>0.0018</td>
<td>0.0154</td>
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<td>0.0090</td>
<td>0.077</td>
<td>80</td>
<td>0.0018</td>
<td>0.0154</td>
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<tr>
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<td>Mikron</td>
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<td>1,000</td>
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<td>0.077</td>
<td>80</td>
<td>0.0018</td>
<td>0.0154</td>
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<tr>
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<td>0.0090</td>
<td>0.077</td>
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<td>0.0018</td>
<td>0.0154</td>
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<tr>
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<td>80</td>
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<tr>
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<td>0.0090</td>
<td>0.077</td>
<td>80</td>
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<tr>
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<td>multi-spindle</td>
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<td>1,000</td>
<td>0.0090</td>
<td>0.077</td>
<td>80</td>
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<tr>
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<tr>
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<td>0.077</td>
<td>80</td>
<td>0.0018</td>
<td>0.0154</td>
</tr>
</tbody>
</table>

#### Totals:

- Air flow is assumed to 1,000 cfm per mist collector as data is limited. Certain units were determined to have air flows less than 1,000 cfm
- Although determined to be insignificant, each wet machine is required to meet the mass loading limitation of 0.03 gr/dscf. The maximum controlled exhaust grain loading and corresponding potential emissions was estimated based upon the estimated inlet grain loading concentration discussed below.
- The inlet grain loading concentration was based upon review of information respective to a permit to construct application submitted to IDEM-AQD by Fiat Chrysler (current corporate name is FCA US LLC). The text from the application is repeated below.

**PM Emissions Calculations from Wet Machining**

The maximum average exhaust grain loading from Controlled wet machining operations is estimated to be approximately 0.0018 gr/dscf, which is well below typical regulatory concentration thresholds. The maximum grain loading is based upon May 2002 stack testing performed at KTP. The maximum single one-hour test value was 0.0014 gr/dscf and the average test result was 0.0007 gr/dscf. The value of 0.0014 was increased by approximately 25% to 0.0018 to provide a conservative estimate of outlet concentration. The corresponding inlet concentration of 0.009 gr/dscf was back calculated based upon an estimated control efficiency of 90% for the mist collector/eliminator in use at the time of the testing.
**Appendix A: Emission Calculations**

**Hinge Saw**

**Company Name:** Dormakaba USA Inc.
**Address City IN Zip:** 6161 East 75th Street, Indianapolis, IN 46250
**Permit Renewal No.:** M097-41387-00119
**Reviewer:** Mena Mekhail

### Particulate Matter

<table>
<thead>
<tr>
<th>Material</th>
<th>Depth</th>
<th>Length</th>
<th>Thickness of Cut</th>
<th>Cuts/Day</th>
<th>Days/Yr</th>
<th>Density lbs/in³</th>
<th>Lbs PM,PM10,PM2.5/Year</th>
<th>Tons PM,PM10,PM2.5/Year</th>
<th>Particulate matter control efficiency %</th>
<th>Controlled Lbs PM,PM10,PM2.5/Year</th>
<th>Controlled Tons PM,PM10,PM2.5/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal hinge stock</td>
<td>0.5</td>
<td>2.00</td>
<td>0.10</td>
<td>100.00</td>
<td>365.00</td>
<td>0.29</td>
<td>1,059</td>
<td>0.53</td>
<td>99%</td>
<td>10.59</td>
<td>0.01</td>
</tr>
</tbody>
</table>

| **TOTALS**             | 1,059 | 0.53   | 10.59            | 0.01      |          |                |                          |                          |                                      |                                     |                                     |

* Emission Calculations provided by the source.
** All material removed is assumed to be particulate matter. (Please note, definite data is not available at this point. The plant assumes the particulate emissions to be less than 10%.)

**Methodology**

Material removed (lbs/year) = Depth(in) * Length(in) * Thickness of cutting blade(in) * Cuts/day * Days/year * Density (lbs/in³)
October 22, 2019

Stephen Leek
Dormakaba USA Incorporated
6161 E 75th St
Indianapolis, IN 46250

Re: Public Notice
Dormakaba USA Inc.
Permit Level: MSOP Renewal
Permit Number: 097-41387-00119

Dear Stephen Leek:

Enclosed is a copy of your draft MSOP Renewal, Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Marion County Library, 7898 North Hague Rd in Indianapolis IN 46256. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Mena Mekhail, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-7434 or dial (317) 234-7434.

Sincerely,

L. Pigott

L. Pigott
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 4/12/19
October 22, 2019

To: Marion County Library 7898 North Hague Rd Indianapolis IN 46256 (Library)

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Dormakaba USA Inc.
Permit Number: 097-41387-00119

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
Notice of Public Comment

October 22, 2019
Dormakaba USA Inc.
097-41387-00119

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.
# Mail Code 61-53

<table>
<thead>
<tr>
<th>IDEM Staff</th>
<th>LPOGOST 10/21/2019</th>
<th>dormakaba USA Incorporated 097-41387-00119 (draft)</th>
<th>Type of Mail: CERTIFICATE OF MAILING ONLY</th>
<th>AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name and address of Sender</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Stephen Leek</td>
<td>dormakaba USA Incorporated 6161 E 75th St Indianapolis IN 46250</td>
<td>Source CAATS</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mark Harris</td>
<td>Plant Manager dormakaba USA Incorporated 6161 E 75th St Indianapolis IN 46250</td>
<td>RO CAATS</td>
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</tr>
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<td>3</td>
<td>Marion County Health Department</td>
<td>3838 N, Rural St Indianapolis IN 46205</td>
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<tr>
<td>4</td>
<td>Marion County Library</td>
<td>7898 North Hague Rd Indianapolis IN 46256</td>
<td>Library</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Indianapolis City Council and Mayors office</td>
<td>200 East Washington Street, Room E Indianapolis IN 46204</td>
<td>Local Official</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Marion County Commissioners</td>
<td>200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204</td>
<td>Local Official</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Matt Mosier</td>
<td>Office of Sustainability City-County Bldg/200 E Washington St. Rm# 2460 Indianapolis IN 46204</td>
<td>Local Official</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>John Schneider</td>
<td>GZA GeoEnvironmental 19950 Victor Parkway - Suite 300 Livonia MI 48152</td>
<td>Consultant</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Johan &amp; Susan Van Den Heuvel</td>
<td>4409 Blue Creek Drive Carmel IN 46033</td>
<td>Affected Party</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Planning Div., Dept. of Metropolitan Development</td>
<td>1735 S. West St. Indianapolis IN 46225</td>
<td>Local Official</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>City of Indianapolis, Attn: General Council</td>
<td>200 East Washington Street Indianapolis IN 46204</td>
<td>Affected Party</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Sebastian Valverde</td>
<td>4235 Springwood Trail Indianapolis IN 46228</td>
<td>Affected Party</td>
<td></td>
</tr>
<tr>
<td><strong>Total number of pieces Listed by Sender</strong></td>
<td><strong>Total number of Pieces Received at Post Office</strong></td>
<td><strong>Postmaster, Per (Name of Receiving employee)</strong></td>
<td><strong>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 mail 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 insured and COD mail. See International Mail Manual for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.</strong></td>
<td></td>
</tr>
</tbody>
</table>

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- Handling Charges
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- Insured Value
- Due Send if COD
- R.R. Fee
- S.D. Fee
- S.H. Fee
- Rest. Del. Fee

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