



DATE: October 28, 2008

TO: Interested Parties / Applicant

RE: H.H. Sumco, Inc./ E097-26597-00440

FROM: Richard Wise  
Administrator  
Office of Environmental Services

## Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 501, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)

October 28, 2008



Mr. Mark Sutton  
H.H. Sumco, Inc.  
1351 South Girls School Road  
Indianapolis, Indiana 46231

CERTIFIED MAIL 7008 0150 0003 5219 3493

Re: Exempt Construction and Operation Status  
**097-26597-00440**

Dear Mr. Sutton:

The application from H.H. Sumco, Inc., received on May 22, 2008, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following metal strip electroplating operation, located at 1351 South Girls School Road, Indianapolis, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) plating line, identified as A-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 526 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) gold plating cell
  - (7) gold plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  
- (b) One (1) plating line, identified as B-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 70 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) gold plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell



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- (c) One (1) plating line, identified as C-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 135 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use tank
  - (13) not in use tank
- (d) One (1) plating line, identified as D-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 171 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) gold plating cell
  - (7) palladium plating cell
  - (8) palladium plating cell
  - (9) gold plating cell
  - (10) tin lead plating cell
  - (11) tin lead plating cell
  - (12) tin lead plating cell
- (e) One (1) plating line, identified as Line 1, constructed in 1998, approved for modification in 2008, with a maximum capacity of 1150 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) nickel plating cell
  - (9) nickel plating cell
  - (10) nickel plating cell
  - (11) nickel plating cell
  - (12) silver cyanide plating cell
  - (13) silver cyanide plating cell
  - (14) silver cyanide plating cell
  - (15) silver cyanide plating cell
  - (16) silver cyanide plating cell
  - (17) silver cyanide plating cell

- (18) silver cyanide plating cell
  - (19) silver cyanide plating cell
- (f) One (1) plating line, identified as Line 4, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2000 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell
- (g) One (1) plating line, identified as Line 5, constructed in 1998, approved for modification in 2008, with a maximum capacity of 1100 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) acid bath
  - (8) acid bath
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use
- (h) One (1) plating line, identified as Line 6, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2500 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) acid bath
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell

- (13) tin plating cell
  - (14) tin plating cell
  - (15) tin plating cell
- (i) One (1) plating line, identified as Line 7, constructed in 1998, approved for modification in 2008, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) pre-dip
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use
- (j) One (1) plating line, identified as Line 8, constructed in 1998, approved for modification in 2008, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) copper plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
- (k) One (1) plating line, identified as Line 9, constructed in 1998, approved for modification in 2008, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) gold plating cell
  - (11) tin plating cell
  - (12) tin plating cell

- (13) not in use tank
  
- (l) One (1) plating line, identified as Line 10, constructed in 1998, approved for modification in 2008, with a maximum capacity of 1500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) acid bath
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  
- (m) One (1) plating line, identified as Line 11, constructed in 1998, with a maximum capacity of 830 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  
- (n) One (1) plating line, identified as Line 12, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2200 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) nickel plating cell
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) acid bath
  - (9) copper plating cell
  - (10) copper plating cell
  - (11) copper plating cell
  - (12) copper plating cell
  - (13) copper plating cell

- (o) One (1) plating line, identified as Line 13, constructed in 1998, approved for modification in 2008, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) acid bath
  - (2) tin plating cell
  - (3) tin plating cell
  - (4) tin plating cell
  - (5) tin plating cell
  - (6) tin plating cell
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use
- (p) One (1) plating line, identified as Line 14, constructed in 1998, approved for modification in 2008, with a maximum capacity of 700 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell
- (q) One (1) plating line, identified as Line 15, constructed in 1998, approved for modification in 2008, with a maximum capacity of 400 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
- (r) One (1) plating line, identified as Line 16, constructed in 1998, approved for modification in 2008, with a maximum capacity of 800 pounds of metal strip per hour, using packed

water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell

- (s) One (1) plating line, identified as Line 17, constructed in 1998, approved for modification in 2008, with a maximum capacity of 3300 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell
- (15) tin plating cell
- (16) tin plating cell

- (t) One (1) plating line, identified as Line 18, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2000 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell

- (14) tin plating cell
- (15) tin plating cell
- (16) tin plating cell
  
- (u) Two (2) natural gas boilers, identified as B1 and B2, constructed after 1983, with a maximum heat input rate of 5.65 and 7.24 MMBtu/hr, respectively, using no control, exhausting to stacks B1 and B2.
  
- (v) One (1) plating line, identified as E-Line, constructed in 2006, with a maximum capacity of 250 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) gold plating cell
  - (8) palladium plating cell
  - (9) palladium plating cell
  - (10) gold plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  
- (w) One (1) plating line, identified as F-Line, constructed in 2006, with a maximum capacity of 70 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  
- (x) One (1) rack plating line, identified as G-Line, constructed in 2006, with a maximum capacity of 128 pounds of metal material per day (material is typically only prepped and plated on first and second shifts), using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) cleaner
  - (4) cleaner
  - (5) acid bath
  - (6) acid bath
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) silver cyanide plating cell
  - (11) silver cyanide plating cell

- (y) One (1) rack plating line, identified as H-Line, constructed in 2006, with a maximum capacity of 128 pounds of metal material per day (material is typically only prepped and plated on first and second shifts), using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) cleaner
  - (4) cleaner
  - (5) acid bath
  - (6) acid bath
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) silver cyanide plating cell
  - (10) silver cyanide plating cell
  - (11) silver cyanide plating cell
  - (12) silver cyanide plating cell
  - (13) silver cyanide plating cell
  - (14) silver cyanide plating cell
  - (15) silver cyanide plating cell
  - (16) silver cyanide plating cell
  - (17) silver cyanide plating cell
  - (18) silver cyanide plating cell
- (z) One (1) plating line, identified as Line 3, constructed in 2004, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
  - (a) Opacity shall not exceed an average of 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.

- (2) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the 5.65 and 7.24 MMBtu per hour boilers (B1 and B2) shall each be limited to 0.56 pound per million Btu of heat input. This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = pounds of particulate matter emitted per million Btu heat input  
Q = total source capacity (MMBtu/hr)

- (3) Pursuant to 40 CFR 63.1, the Permittee shall comply with the provisions of 40 CFR 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the Plating Lines A through H and Lines 1, 3 through 18 except as otherwise specified in 40 CFR Part 63, Subpart WWWWWWW.
- (4) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports to:

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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Ave.  
Indianapolis, IN 46221

and

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

- (5) The Permittee shall comply with the following provisions of 40 CFR 63, Subpart WWWWWWW (included as Attachment A of this exemption), for the Plating Lines A through H and Lines 1, 3 through 18:

- (1) 40 CFR 63.11504
- (2) 40 CFR 63.11505(a)(1), (b), (c) and (e)
- (3) 40 CFR 63.11506(a)
- (4) 40 CFR 63.11507(a)(2), (b), (c), (d) and (g)
- (5) 40 CFR 63.11508(a), (b), (c)(2) through (7), and (d)(1)(2)(4) through (8)
- (6) 40 CFR 63.11509(a), (b), (c)(2)(i) and (3) through (7), (d), (e) and (f)
- (7) 40 CFR 63.11510
- (8) 40 CFR 63.11511
- (9) 40 CFR 63.11512
- (10) Table 1

This exemption revises the previous exemption issued to this source. An application or notification shall be submitted in accordance with 326 IAC 2 to the OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

ORIGINAL SIGNED BY

Richard Wise, Administrator  
Office of Env. Services, DPW

AB/EVP

cc: File  
Air Compliance – Matt Mosier  
Permits – Anh-tuan Nguyen  
IDEM – Mindy Hahn  
Marion County Health Department

## Attachment A

### **Subpart WWWW—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.

(v) Electroforming.

(vi) Electropolishing.

(2) An area source of HAP emissions 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]

##### **§ 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; electroless 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) Thermal spraying conducted to repair surfaces.

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

(6) Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Material Safety Data Sheet for the material.

(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.

#### **§ 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, as defined in §63.11511, "What definitions apply to this subpart?", in the bath of the affected tank 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 tank bath, as in the original make-up of the tank.

(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 tank upon start-up. 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 equipment 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, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

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

(ii) 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.

(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 or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

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

(ii) 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.

(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.

### **§ 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 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 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 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 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 start-up, 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, fabric filter, 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 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 purchased 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.

(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 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 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 cover your tanks to comply with this subpart, 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.

### **§ 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 start up your new affected source after July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after 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) and (2) 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.
- (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 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 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.
- (4) If you own or operate an affected batch electrolytic process 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 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.
- (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 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 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.

## **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 that is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

*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.

*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 with any of the plating and polishing metal HAP, as defined in this section, using hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles.

*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.

*Electrolytic plating 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 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.

*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.

*Flash electroplating* means an electrolytic 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 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.

*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 spraying operation that applies one or more plating and polishing metal HAP, as defined in this section, to parts and products used in manufacturing. These processes include but are not limited to: Non-chromium electroplating; electroforming; electropolishing; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

*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, 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); electroless plating; other non-electrolytic metal coating processes, 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.

*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, and does not contain manganese in amounts greater than or equal to 1.0 percent by weight, 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; electroless 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 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 thermal spraying or dry polishing with machines.

*PM* means solid or particulate matter that is emitted into the air.

*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.

*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 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.

*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.

#### **§ 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 WWWW 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.

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

<sup>1</sup>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.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Indianapolis  
Office of Environmental Services**

Technical Support Document (TSD) for an Exemption

<b>Source Description and Location</b>
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<b>Source Name:</b>	<b>H.H. Sumco, Inc.</b>
<b>Source Location:</b>	<b>1351 South Girls School Road, Indianapolis, IN 46231</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>3471</b>
<b>Exemption No.:</b>	<b>E097-26597-00440</b>
<b>Permit Reviewer:</b>	<b>AB/EVP</b>

On May 22, 2008, the Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) received an application from H.H. Sumco, Inc. related to the addition to the Exemption of emission units which are existing at the plant but are not included in the existing approval, modifications to some existing plating lines and the continued operation of an existing metal strip electroplating operation.

<b>Existing Approvals</b>
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The source was issued Exemption No. 097-16623-00440 on January 17, 2003.

<b>County Attainment Status</b>
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The source is located in Marion County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	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.
O <sub>3</sub>	Attainment effective October 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
<sup>1</sup> Attainment 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. Basic Nonattainment effective April 5, 2005 for PM <sub>2.5</sub> .	

\*These documents are incorporated by reference.

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) 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) PM2.5

Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.

(c) Other Criteria Pollutants

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

<b>Fugitive Emissions</b>
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The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

<b>Background and Description of Emission Units and Pollution Control Equipment</b>
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The Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) have reviewed an application, submitted by H.H. Sumco, Inc., relating to modifications to plating lines A through D, 1, 4 through 10, 12 through 18 and the addition to the Exemption of plating lines E through H and 3 which are existing at the plant but are not included in the existing approval.

The source consists of the following existing emission units:

- (a) One (1) plating line, identified as A-Line, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~50~~ **526** pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - ~~(6) nickel plating cell~~
  - ~~(7)~~**(6)** gold plating cell
  - ~~(8)~~**(7)** gold plating cell

- ~~(9)~~(8) tin plating cell  
~~(10)~~(9) tin plating cell  
~~(11)~~(10) tin plating cell
- (b) One (1) plating line, identified as B-Line, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~50~~ **70** pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) gold plating cell
  - (8) gold plating cell
  - ~~(8)~~(9) **gold plating cell**
  - ~~(9)~~(10) tin plating cell
  - ~~(10)~~(11) tin plating cell
  - ~~(11)~~(12) tin plating cell
- (c) One (1) plating line, identified as C-Line, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~62~~ **135** pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use tank
  - (13) not in use tank
- (d) One (1) plating line, identified as D-Line, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~62~~ **171** pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - ~~(5)~~ acid bath
  - ~~(6)~~(5) nickel plating cell
  - ~~(7)~~(6) nickel **gold** plating cell
  - ~~(8)~~(7) gold **palladium** plating cell
  - ~~(9)~~(8) gold **palladium** plating cell
  - ~~(10)~~(9) tin **gold** plating cell
  - ~~(11)~~(10) tin **lead** plating cell
  - ~~(12)~~ not in use tank

- ~~(13) not in use tank~~
- (11) tin lead plating cell**
- (12) tin lead plating cell**

(e) One (1) plating line, identified as Line 1, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~200~~ **1150** pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) nickel plating cell
- (6) nickel plating cell
- (7) nickel plating cell
- (8) nickel plating cell
- (9) nickel plating cell**
- (10) nickel plating cell**
- (11) nickel plating cell**
- ~~(9)~~**(12) silver cyanide plating cell**
- ~~(10)~~**(13) silver cyanide plating cell**
- ~~(11)~~**(14) silver cyanide plating cell**
- ~~(12)~~**(15) silver cyanide plating cell**
- ~~(13)~~**(16) silver cyanide plating cell**
- (17) silver cyanide plating cell**
- (18) silver cyanide plating cell**
- (19) silver cyanide plating cell**

(f) One (1) plating line, identified as Line 4, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~1250~~ **2000** pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) ~~tin~~ **copper** plating cell
- (6) ~~tin~~ **copper** plating cell
- (7) ~~tin~~ **copper** plating cell
- (8) ~~tin~~ **copper** plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell**

(g) One (1) plating line, identified as Line 5, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~500~~ **1100** pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) copper plating cell

- (5) copper plating cell
  - (6) copper plating cell
  - (7) acid bath
  - (8) ~~tin plating cell~~ **acid bath**
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) ~~tin plating cell~~ **not in use**
  - (13) ~~tin plating cell~~ **not in use**
- (h) One (1) plating line, identified as Line 6, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~1500~~ **2500** pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) ~~tin~~ **nickel** plating cell
  - (6) ~~tin~~ **nickel** plating cell
  - (7) ~~tin~~ **copper** plating cell
  - (8) ~~tin~~ **copper** plating cell
  - (9) ~~tin plating cell~~ **acid bath**
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell**
  - (15) tin plating cell**
- (i) One (1) plating line, identified as Line 7, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~200~~ **500** pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) ~~acid bath~~ **copper plating cell**
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) ~~copper plating cell~~ **pre-dip**
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) ~~tin plating cell~~ **not in use**
  - (13) ~~tin plating cell~~ **not in use**
- (j) One (1) plating line, identified as Line 8, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~625~~ **500** pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath

- (4) acid bath
  - (5) ~~copper~~ nickel plating cell
  - (6) ~~copper~~ nickel plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) ~~tin~~ copper plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
- (k) One (1) plating line, identified as Line 9, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~62~~ **500** pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) ~~tin~~ gold plating cell
  - (11) tin plating cell
  - (12) ~~not in use tank~~ tin plating cell
  - (13) not in use tank
- (l) One (1) plating line, identified as Line 10, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~4250~~ **1500** pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) acid bath
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
- (m) One (1) plating line, identified as Line 11, **constructed in 1998**, with a maximum capacity of 830 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell

- (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
- (n) One (1) plating line, identified as Line 12, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~1500~~ **2200** pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) nickel plating cell
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) acid bath
  - (9) copper plating cell
  - (10) copper plating cell
  - (11) copper plating cell
  - (12) copper plating cell
  - (13) copper plating cell
- (o) One (1) plating line, identified as Line 13, **constructed in 1998, approved for modification in 2008**, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) acid bath
  - (2) tin plating cell
  - (3) tin plating cell
  - (4) tin plating cell
  - (5) tin plating cell
  - (6) tin plating cell
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use
- (p) One (1) plating line, identified as Line 14, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~750~~ **700** pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell

- (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell**
- (q) One (1) plating line, identified as Line 15, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~1800~~ **400** pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) ~~tin~~ **copper** plating cell
  - (6) ~~tin~~ **copper** plating cell
  - (7) ~~tin~~ **copper** plating cell
  - (8) ~~tin~~ **copper** plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) ~~not in use~~ **tin plating cell**
  - (12) ~~not in use~~ **tin plating cell**
  - (13) ~~not in use~~
- (r) One (1) plating line, identified as Line 16, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~200~~ **800** pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) ~~nickel~~ **tin** plating cell
  - (6) ~~nickel~~ **tin** plating cell
  - (7) ~~nickel~~ **tin** plating cell
  - (8) ~~nickel~~ **tin** plating cell
  - (9) ~~silver cyanide~~ **tin** plating cell
  - (10) ~~silver cyanide~~ **tin** plating cell
  - (11) ~~silver cyanide~~ **tin** plating cell
  - (12) ~~silver cyanide~~ **tin** plating cell
  - (13) ~~silver cyanide~~ **tin** plating cell
  - (14) tin plating cell**
- (s) One (1) plating line, identified as Line 17, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~3750~~ **3300** pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) tin plating cell
  - (6) tin plating cell

- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell**
- (15) tin plating cell**
- (16) tin plating cell**

(t) One (1) plating line, identified as Line 18, **constructed in 1998, approved for modification in 2008**, with a maximum capacity of ~~3750~~ **2000** pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell**
- (15) tin plating cell**
- (16) tin plating cell**

(u) Two (2) natural gas boilers, identified as B1 and B2, **constructed after 1983**, with a maximum heat input rate of 5.65 and 7.24 MMBtu/hr, respectively, using no control, exhausting to stacks B1 and B2. ~~[B2 is currently not in use]~~

The following is a list of the existing emission units and pollution control devices which are not in the current approval:

(v) **One (1) plating line, identified as E-Line, constructed in 2006, with a maximum capacity of 250 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:**

- (1) cleaner**
- (2) cleaner**
- (3) acid bath**
- (4) acid bath**
- (5) acid bath**
- (6) nickel plating cell**
- (7) gold plating cell**
- (8) palladium plating cell**
- (9) palladium plating cell**
- (10) gold plating cell**
- (11) tin plating cell**
- (12) tin plating cell**
- (13) tin plating cell**

- (w) One (1) plating line, identified as F-Line, constructed in 2006, with a maximum capacity of 70 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
- (x) One (1) rack plating line, identified as G-Line, constructed in 2006, with a maximum capacity of 128 pounds of metal material per day (material is typically only prepped and plated on first and second shifts), using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) cleaner
  - (4) cleaner
  - (5) acid bath
  - (6) acid bath
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) silver cyanide plating cell
  - (11) silver cyanide plating cell
- (y) One (1) rack plating line, identified as H-Line, constructed in 2006, with a maximum capacity of 128 pounds of metal material per day (material is typically only prepped and plated on first and second shifts), using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) cleaner
  - (4) cleaner
  - (5) acid bath
  - (6) acid bath
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) silver cyanide plating cell
  - (10) silver cyanide plating cell
  - (11) silver cyanide plating cell
  - (12) silver cyanide plating cell
  - (13) silver cyanide plating cell
  - (14) silver cyanide plating cell
  - (15) silver cyanide plating cell
  - (16) silver cyanide plating cell
  - (17) silver cyanide plating cell
  - (18) silver cyanide plating cell

(z) **One (1) plating line, identified as Line 3, constructed in 2004, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:**

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) copper plating cell
- (6) copper plating cell
- (7) copper plating cell
- (8) copper plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell

Under 40 CFR 63.11505, Subpart WWWWWW, Plating Lines A through H and Lines 1, 3 through 18 are considered existing affected facilities. [40 CFR Part 63, Subpart WWWWWW]

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

**Permit Level Determination – Exemption**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/Emission Unit	Potential To Emit of the Entire Source (tons/year)							
	PM	PM10*	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Plating Lines A through H and Lines 1, 3 through 18	0.1	0.1	0.00	0.00	0.00	0.00	0.1	0.01 (nickel)
Boilers B1 and B2	0.1	0.4	negl.	5.6	0.3	4.7	0.1	0.1 (hexane)
Total PTE of Entire Source	0.2	0.5	negl.	5.6	0.3	4.7	0.2	0.1 (hexane)
Exemption Levels	5	5	10	10	10	25	25	10
Registration Levels	25	25	25	25	25	100	-	-

negl. = negligible  
 \* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

(a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants

are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).

- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE 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.

### **Federal Rule Applicability Determination**

#### New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for 40 CFR 60, Subparts Da, Db, Dc and (326 IAC 12), are not included in the permit because the heat input capacity of boilers B1 and B2 are each less than 10 MMBtu per hour.
- (b) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

#### National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (c) The requirements of 40 CFR Part 63, Subpart N (National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks) are not included in this permit for this source because this source does not perform chromium electroplating.
- (d) The requirements of 40 CFR Part 63, Subpart W (National Emission Standards for Hazardous Air Pollutants (NESHAPs) Area Source Standards for Plating and Polishing Operations) applies to new and existing area sources of plating and polishing that use any of the plating and polishing metal HAP (cadmium, chromium, lead, manganese, or nickel) in tanks or thermal spraying processes; and dry mechanical polishing operations used to remove or polish products with these metal HAP after plating. This existing area source uses the plating and polishing metal HAPs (manganese and nickel) in tanks.

The units subject to this rule include the following:

- (a) One (1) plating line, identified as A-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 526 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) gold plating cell
  - (7) gold plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
- (b) One (1) plating line, identified as B-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 70 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:

- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) gold plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
- (c) One (1) plating line, identified as C-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 135 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use tank
  - (13) not in use tank
- (d) One (1) plating line, identified as D-Line, constructed in 1998, approved for modification in 2008, with a maximum capacity of 171 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) gold plating cell
  - (7) palladium plating cell
  - (8) palladium plating cell
  - (9) gold plating cell
  - (10) tin lead plating cell
  - (11) tin lead plating cell
  - (12) tin lead plating cell
- (e) One (1) plating line, identified as Line 1, constructed in 1998, approved for modification in 2008, with a maximum capacity of 1150 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath

- (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) nickel plating cell
  - (9) nickel plating cell
  - (10) nickel plating cell
  - (11) nickel plating cell
  - (12) silver cyanide plating cell
  - (13) silver cyanide plating cell
  - (14) silver cyanide plating cell
  - (15) silver cyanide plating cell
  - (16) silver cyanide plating cell
  - (17) silver cyanide plating cell
  - (18) silver cyanide plating cell
  - (19) silver cyanide plating cell
- (f) One (1) plating line, identified as Line 4, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2000 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell
- (g) One (1) plating line, identified as Line 5, constructed in 1998, approved for modification in 2008, with a maximum capacity of 1100 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) acid bath
  - (8) acid bath
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use

- (h) One (1) plating line, identified as Line 6, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2500 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) acid bath
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell
  - (15) tin plating cell
- (i) One (1) plating line, identified as Line 7, constructed in 1998, approved for modification in 2008, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) pre-dip
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use
- (j) One (1) plating line, identified as Line 8, constructed in 1998, approved for modification in 2008, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) copper plating cell
  - (10) tin plating cell
  - (11) tin plating cell

- (12) tin plating cell
- (13) tin plating cell
  
- (k) One (1) plating line, identified as Line 9, constructed in 1998, approved for modification in 2008, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) gold plating cell
  - (9) gold plating cell
  - (10) gold plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) not in use tank
  
- (l) One (1) plating line, identified as Line 10, constructed in 1998, approved for modification in 2008, with a maximum capacity of 1500 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) acid bath
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  
- (m) One (1) plating line, identified as Line 11, constructed in 1998, with a maximum capacity of 830 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) copper plating cell
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell

- (n) One (1) plating line, identified as Line 12, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2200 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) nickel plating cell
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell
  - (8) acid bath
  - (9) copper plating cell
  - (10) copper plating cell
  - (11) copper plating cell
  - (12) copper plating cell
  - (13) copper plating cell
- (o) One (1) plating line, identified as Line 13, constructed in 1998, approved for modification in 2008, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) acid bath
  - (2) tin plating cell
  - (3) tin plating cell
  - (4) tin plating cell
  - (5) tin plating cell
  - (6) tin plating cell
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) not in use
  - (13) not in use
- (p) One (1) plating line, identified as Line 14, constructed in 1998, approved for modification in 2008, with a maximum capacity of 700 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell

- (12) tin plating cell
  - (13) tin plating cell
- (q) One (1) plating line, identified as Line 15, constructed in 1998, approved for modification in 2008, with a maximum capacity of 400 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
- (r) One (1) plating line, identified as Line 16, constructed in 1998, approved for modification in 2008, with a maximum capacity of 800 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) tin plating cell
  - (6) tin plating cell
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell
- (s) One (1) plating line, identified as Line 17, constructed in 1998, approved for modification in 2008, with a maximum capacity of 3300 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) tin plating cell
  - (6) tin plating cell
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell

- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell
- (15) tin plating cell
- (16) tin plating cell
- (t) One (1) plating line, identified as Line 18, constructed in 1998, approved for modification in 2008, with a maximum capacity of 2000 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) tin plating cell
  - (6) tin plating cell
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
  - (14) tin plating cell
  - (15) tin plating cell
  - (16) tin plating cell
- (v) One (1) plating line, identified as E-Line, constructed in 2006, with a maximum capacity of 250 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) acid bath
  - (6) nickel plating cell
  - (7) gold plating cell
  - (8) palladium plating cell
  - (9) palladium plating cell
  - (10) gold plating cell
  - (11) tin plating cell
  - (12) tin plating cell
  - (13) tin plating cell
- (w) One (1) plating line, identified as F-Line, constructed in 2006, with a maximum capacity of 70 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
  - (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) nickel plating cell
  - (6) nickel plating cell
  - (7) nickel plating cell

- (8) tin plating cell
  - (9) tin plating cell
  - (10) tin plating cell
- (x) One (1) rack plating line, identified as G-Line, constructed in 2006, with a maximum capacity of 128 pounds of metal material per day (material is typically only prepped and plated on first and second shifts), using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) cleaner
  - (4) cleaner
  - (5) acid bath
  - (6) acid bath
  - (7) tin plating cell
  - (8) tin plating cell
  - (9) tin plating cell
  - (10) silver cyanide plating cell
  - (11) silver cyanide plating cell
- (y) One (1) rack plating line, identified as H-Line, constructed in 2006, with a maximum capacity of 128 pounds of metal material per day (material is typically only prepped and plated on first and second shifts), using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) cleaner
  - (4) cleaner
  - (5) acid bath
  - (6) acid bath
  - (7) copper plating cell
  - (8) copper plating cell
  - (9) silver cyanide plating cell
  - (10) silver cyanide plating cell
  - (11) silver cyanide plating cell
  - (12) silver cyanide plating cell
  - (13) silver cyanide plating cell
  - (14) silver cyanide plating cell
  - (15) silver cyanide plating cell
  - (16) silver cyanide plating cell
  - (17) silver cyanide plating cell
  - (18) silver cyanide plating cell
- (z) One (1) plating line, identified as Line 3, constructed in 2004, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
  - (2) cleaner
  - (3) acid bath
  - (4) acid bath
  - (5) copper plating cell
  - (6) copper plating cell
  - (7) copper plating cell
  - (8) copper plating cell

- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell
- (14) tin plating cell

Under 40 CFR 63.11505, Subpart WWWWWW, Plating Lines A through H and Lines 1, 3 through 18 are considered existing affected facilities. [40 CFR Part 63, Subpart WWWWWW]

Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.11504
- (2) 40 CFR 63.11505(a)(1), (b), (c) and (e)
- (3) 40 CFR 63.11506(a)
- (4) 40 CFR 63.11507(a)(2), (b), (c), (d) and (g)
- (5) 40 CFR 63.11508(a), (b), (c)(2) through (7), and (d)(1)(2)(4) through (8)
- (6) 40 CFR 63.11509(a), (b), (c)(2)(i) and (3) through (7), (d), (e) and (f)
- (7) 40 CFR 63.11510
- (8) 40 CFR 63.11511
- (9) 40 CFR 63.11512
- (10) Table 1

Nonapplicable portions of the NESHAP will not be included in the permit.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the Plating Lines A through H and Lines 1, 3 through 18, except as otherwise specified in 40 CFR 63, Subpart WWWWWW.

- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD are not included in this permit for the two (2) natural gas boilers because this source is a minor source of hazardous air pollutants (HAPs).
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (g) 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.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Exemptions)  
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326

IAC 2-4.1.

- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) 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.
  - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)  
Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the 5.65 and 7.24 MMBtu per hour boilers (B1 and B2) shall each be limited to 0.56 pound per million Btu of heat input. This limitation is based on the following equation:
- $$Pt = \frac{1.09}{Q^{0.26}} = 0.56 \text{ lb/MMBtu}$$
- Where Q = total source capacity (MMBtu/hr)  
For this source, Total Q = 12.89 MMBtu/hr.  
Based on page 5 of Appendix A, the PM emission rate is:  
0.1 ton/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.022 lb/hr  
(0.022 lb/hr / 12.89 MMBtu/hr) = 0.0018 lb PM per MMBtu
- Therefore, the two (2) boilers identified as B1 and B2, will be able to comply with this rule.
- (f) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Process)  
The electroplating operations use dip coating and, therefore, is exempt from this rule, pursuant to 326 IAC 6-3-1(b)(5).
- (g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (i) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
The emission units at this source are not subject to the requirements of 326 IAC 8-1-6, since the unlimited potential to emit of VOC from each of the emission unit is less than twenty-five (25) tons per year.

- (j) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)  
This source is not subject to the requirements of 326 IAC 7-1.1. This rule is applicable to emission units with a potential to emit twenty five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. The potential to emit from boilers B1 and B2 is less than twenty five (25) tons per year or ten (10) pounds per hour of sulfur dioxide.

### 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 May 22, 2008.

The operation of this source shall be subject to the conditions of the attached proposed Exemption No. 097-26597-00440. The staff recommends to the Administrator that this Exemption be approved.

### OES Contact

- (a) Questions regarding this proposed permit can be directed to:
- Alic Bent  
c/o OES, Air Permits  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221  
(317) 327-2221  
or dial directly: (317) 863-2514
- (b) A copy of the findings is available on the Internet at: [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's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov).

**Appendix A: Emissions Calculations  
Electroplating**

**Company Name:** H.H. Sumco, Inc.  
**Address City IN Zip:** 1351 South Girls School Road, Indianapolis, IN 46231  
**Exemption No.:** 097-26597-00440  
**Reviewer:** Alic Bent/EVP  
**Date:** July 2, 2008

<b>Emission Factor</b>				
$EF_m = k_1 (EE_m / e_m) (C_m) (D_m)$				
where:				
EF <sub>m</sub> = Emissions factor for emission of metal in gr/dscf				
k <sub>1</sub> = dimensionless constant (3.3x10 <sup>-7</sup> )				
EE <sub>m</sub> = Electrochemical equivalent of metal in A-hr/ mil-ft <sup>2</sup>				
e <sub>m</sub> = cathode efficiency for metal in %				
C <sub>m</sub> = bath concentration of metal in oz/gal				
D <sub>m</sub> = current density for plating of metal in A/ft <sup>2</sup>				
Emission Factors are based on: USEPA AP-42 Section 12.20, 1996.				
	EE <sub>m</sub> (A-hr/mil-ft <sup>2</sup> )	e <sub>m</sub> (%)	C <sub>m</sub> (oz/gal)	D <sub>m</sub> (A/ft <sup>2</sup> )
Nickel	19	94	10	75
Silver	6.16	99	9	60
Copper	8.84	95	4	60
Tin	7.82	95	3.5	90
Tin Lead	6.9	90	10	100
Gold	6.2	99	0.8	70
Palladium	14.2	99	10	100
<b>Potential Emissions</b>				
PTE (tons/yr) = E <sub>f</sub> m (grains/Amp-hr) x Capacity (Amps) x 8760 hrs/yr x lbs/7000 grains x ton/2000 lbs				
Converted grains/dscf to grains/amp-hr by multiplying by 100 (USEPA AP-42 Section 12.20, 1996)				
Potential Emissions	grains/dscf	tons/yr	# baths	
<b>Line 1</b>				
Nickel	5.00266E-05	1.57E-03		7
Silver	0.000011088	1.39E-04		8
Total (tons/yr)				1.21E-02
<b>Line 3</b>				
Copper	7.36977E-06	1.38E-04		4
Tin	8.55673E-06	3.75E-04		6
Total (tons/yr)				2.80E-03

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Potential Emissions	grains/dscf	tons/yr	# baths
<b>Line 4</b>			
Copper	7.36977E-06	1.38E-04	4
Tin	8.55673E-06	3.75E-04	6
Total (tons/yr)			2.80E-03
<b>Line 5</b>			
Copper	9.21221E-06	1.73E-04	3
Tin	8.55673E-06	3.75E-04	3
Total (tons/yr)			1.64E-03
<b>Line 6</b>			
Copper	9.21221E-06	1.73E-04	2
Nickel	2.25120E-05	7.04E-04	2
Tin	8.55673E-06	3.75E-04	6
Total (tons/yr)			4.00E-03
<b>Line 7</b>			
Copper	1.28971E-05	2.42E-04	4
Tin Lead	0.0000253	4.75E-04	2
Tin	1.95582E-05	8.57E-04	3
Total (tons/yr)			4.49E-03
<b>Line 8</b>			
Copper	9.21221E-06	1.73E-04	3
Nickel	5.00266E-05	1.57E-03	2
Tin	1.95582E-05	8.57E-04	4
Total (tons/yr)			7.08E-03
<b>Line 9</b>			
Nickel	4.00213E-05	1.25E-03	2
Tin	2.93373E-05	1.28E-03	2
Gold	1.15733E-06	1.45E-07	3
Total (tons/yr)			5.07E-03
<b>Line 10</b>			
Copper	7.36977E-06	1.38E-04	4
Tin	7.33434E-06	3.21E-04	6
Total (tons/yr)			2.48E-03

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Potential Emissions	grains/dscf	tons/yr	# baths
<b>Line 11</b>			
Copper	1.10547E-05	2.08E-04	5
Tin	7.33434E-06	3.21E-04	5
Total (tons/yr)			2.64E-03
<b>Line 12</b>			
Copper	9.21221E-06	1.73E-04	5
Nickel	5.50293E-05	1.72E-03	4
Total (tons/yr)			7.75E-03
<b>Line 13</b>			
Tin	9.77912E-06	4.28E-04	10
Total (tons/yr)			4.28E-03
<b>Line 14</b>			
Copper	6.44855E-06	1.21E-04	4
Tin	8.55673E-06	3.75E-04	4
Total (tons/yr)			1.98E-03
<b>Line 15</b>			
Copper	2.33376E-05	4.38E-04	4
Tin	1.71135E-05	7.50E-04	4
Total (tons/yr)			4.75E-03
<b>Line 16</b>			
Tin	7.33434E-06	3.21E-04	10
Total (tons/yr)			3.21E-03
<b>Line 17</b>			
Tin	8.55673E-06	3.75E-04	12
Total (tons/yr)			4.50E-03
<b>Line 18</b>			
Tin	8.55673E-06	3.75E-04	12
Total (tons/yr)			4.50E-03
<b>Line A</b>			
Nickel	6.00319E-05	1.88E-03	1
Tin Lead	0.0000253	1.27E-03	3
Silver	0.000000616	7.71E-06	2
Total (tons/yr)			5.69E-03

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**Date:** July 2, 2008

Potential Emissions	grains/dscf	tons/yr	# baths
<b>Line B</b>			
Nickel	6.00319E-05	1.88E-03	2
Tin Lead	0.0000253	1.27E-03	3
Gold	7.23333E-07	9.05E-08	3
Total (tons/yr)			7.56E-03
<b>Line C</b>			
Nickel	6.00319E-05	1.88E-03	2
Tin Lead	0.0000253	1.27E-03	3
Gold	0.000001302	1.63E-07	3
Total (tons/yr)			7.56E-03
<b>Line D</b>			
Nickel	6.00319E-05	1.88E-03	1
Tin Lead	0.00002783	1.39E-03	3
Palladium	4.73333E-05	5.92E-06	2
Gold	1.15733E-06	1.45E-07	2
Total (tons/yr)			6.07E-03
<b>Line E</b>			
Nickel	5.50293E-05	1.72E-03	1
Tin Lead	0.00002783	1.39E-03	3
Palladium	4.73333E-05	5.92E-06	2
Gold	1.15733E-06	1.45E-07	2
Total (tons/yr)			5.91E-03
<b>Line F</b>			
Nickel	6.00319E-05	1.88E-03	3
Tin	8.55673E-06	3.75E-04	3
Total			6.76E-03
<b>Line G</b>			
Tin Lead	0.00002783	1.39E-03	3
Silver	0.000014784	1.85E-04	2
Total (tons/yr)			4.55E-03
<b>Line H</b>			
Copper	1.57529E-05	2.96E-04	2
Silver	4.4352E-07	5.55E-06	10
Total (tons/yr)			6.47E-04
<b>Overall total (tons/yr):</b>			<b>1.21E-01</b>

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

**Company Name: H.H. Sumco, Inc.  
Address City IN Zip: 1351 South Girls School Road, Indianapolis, IN 46231  
Exemption No.: 097-26597-00440  
Reviewer: Alic Bent/EVP  
Date: July 8, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
12.9	112.9

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.4	0.0	5.6	0.3	4.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 6 for HAPs emissions calculations.

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

**Small Industrial Boiler  
HAPs Emissions**

**Company Name:** H.H. Sumco, Inc.  
**Address City IN Zip:** 1351 South Girls School Road, Indianapolis, IN 46231  
**Exemption No.:** 097-26597-00440  
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HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.186E-04	6.775E-05	4.234E-03	1.016E-01	1.920E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.823E-05	6.210E-05	7.904E-05	2.145E-05	1.186E-04

Methodology is the same as page 5.

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