



CHROMIUM ELECTROPLATING/ANODIZING



COMPLIANCE INSPECTION CHECKLIST

INSPECTION TYPE: ANNUAL (INS1, INS2) COMPLAINT/DISCOVERY (CI)
 RE-INSPECTION (FUI) ARMS COMPLAINT NO:

AIRS ID#: 1030306 **DATE:** 4/13/12 **ARRIVE:** 10:30 **DEPART:** 12:15

FACILITY NAME: FREEDOM METAL FINISHING

FACILITY LOCATION: 5095 113TH AVE N
CLEARWATER 33760-4834

OWNER/AUTHORIZED REPRESENTATIVE: KEITH EIDSCHUN **PHONE:** (727)573-2464
Email: **Mobile:**
CONTACT NAME: **PHONE:**
Email: **Mobile:**

ENTITLEMENT PERIOD: 5/29/2010 / 5/29/2015
 (effective date) (end date)

PART I: INSPECTION COMPLIANCE STATUS (check only one box)

IN COMPLIANCE MINOR Non-COMPLIANCE SIGNIFICANT Non-COMPLIANCE

PART II: CLASSIFICATION – Rule 62-213.300 FAC
 Facility type(s)/applicable standard as indicated on notification form:

1. **Hard Chromium Plating**

a. **Existing Large** (0.015 mg/dscm) b. **Existing Small** (0.03 mg/dscm) -----
 c. **New** (0.015 mg/dscm) ----- d. **Alternative Standard** for existing facilities
 (0.03 mg/dscm) using a rolling average of
 rectifier capacity (less than 60 million A-hr/year)

2. **Decorative Chromium Plating/Anodizing**

a. **Chromic Acid Bath**

1) Emissions of ≤ 0.01 mg/dscm (4.4×10^{-6} gr/dscf) -----
 2) Surface tension of ≤ 45 dynes/cm (3.1×10^{-3} lb-f/ft) -----
 (May only be selected if a wetting agent is used.)

b. **Trivalent Chromium Bath**

1) With wetting agent -----
 2) Without wetting agent ≤ 0.01 mg/dscm (4.4×10^{-6} gr/dscf)

c. **Chromium Anodizing**

1) Emissions of ≤ 0.01 mg/dscm (4.4×10^{-6} gr/dscf) -----
 2) Surface tension of 45 dynes/cm (3.1×10^{-3} lb-f/ft) -----
 (May only be selected if a wetting agent is used.)

PART III: CONTROL TECHNOLOGY – Rule 62-213.300 FAC

(Select control device)

DEVICE IN USE?

- | | |
|--|---|
| 1. <input type="checkbox"/> Composite Mesh Pad ----- | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. <input type="checkbox"/> Fiber Bed Mist Eliminator ----- | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. <input type="checkbox"/> Packed Bed Scrubber ----- | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 4. <input type="checkbox"/> Packed Bed Scrubber/Composite Mesh Pad ----- | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. <input type="checkbox"/> Foam Blanket Fume Suppressant ----- | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 6. <input checked="" type="checkbox"/> Fume Suppressant w/ Wetting Agent ----- | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Has the facility conducted an initial performance test to establish monitoring parameters? Yes No N/A
(Not required for sources using a wetting agent or 1-inch foam blanket thickness)

PART IV: RECORDKEEPING/REPORTING REQUIREMENTS – Rule 62-213.300(3)

Has the responsible official maintained the following records?

- Quarterly inspection records for add-on air pollution control devices and monitoring equipment. *(applicable only to a facility using a packed bed scrubber, fiber-bed mist eliminator, or composite mesh pad)* ----- Yes No N/A
- Operations and Maintenance Plan (OMP). *(applicable only to a facility using a packed bed scrubber, fiber-bed mist eliminator, or composite mesh pad)* ----- Yes No N/A
- Maintenance records for the source, add-on pollution control devices, and monitoring equipment (equipment identified, date performed, description). ----- Yes No
- Records of date of occurrence, duration, cause, and corrective action of each malfunction of process, add-on pollution control device, and monitoring equipment. Yes No
- Results of all performance tests. ----- Yes No N/A
- Records of monitoring data. *(not applicable to trivalent chromium baths using a wetting agent)* ----- Yes No N/A

Composite Mesh Pad

Measure the pressure drop across the CMP daily. ----- Yes No

Packed Bed Scrubber

Measure the pressure drop across the PBS and the inlet velocity daily. ----- Yes No

Fiber-Bed Mist Eliminator

Measure the pressure drop across the FBME and the upstream device daily. --- Yes No

Packed Bed Scrubber/Composite Mesh Pad

Measure the pressure drop across the CMP daily. ----- Yes No

Foam Blanket Fume Suppressant

Measure the foam blanket thickness at the appropriate interval.. ----- Yes No

Fume Suppressant w/ Wetting Agent

Measure the surface tension at the appropriate interval. ----- Yes No

- Purchase records of wetting agent components. ----- Yes No N/A
- Records of the date and time that fume suppressants are added to the bath. ---- Yes No N/A
- Records of rectifier capacity, if used to determine facility size. ----- Yes No N/A
- Records of the total process operating time. ----- Yes No
- Records identifying specific periods of excess emissions. ----- Yes No
- Startup, Shutdown & Malfunction Plan. ----- Yes No

Jeff Morris

4/13/12

Inspector's Name (Please Print)

Date of Inspection

4/13/13

Inspector's Signature

Approximate Date of Next Inspection

COMMENTS: 4/12/13 - An annual full compliance inspection revealed that the only operation is the chromic acid process. The decorative tank has been shut down. The company is planning to remove the tank in the next couple of months with the residual chromium sent off site for recycling. On 3/29/13 the facility performed a surface tension test. The test reported 39 dynes/cm (45 dynes/cm limited). 1 L of Benchbrite 1800 suppressant was added. A retest indicated the surface tension = 36.8 dynes/cm. Additionally a copy of the operation log is attached to the inspection report. Freedom Metal Finishings procedure is to perform the monitoring of the tank every 1500-1700 minutes. The comment is noted to tank operators at the top the Operation Log.

Additionally, Freedom Metal Finishing is required to keep monthly paint usage logs. The usage logs is to verify the company never exceeded the RACT limit of 750 gallons/month during the compliance year. The highest month (May, 12') = 253.7 gallons of paint. A copy of the spreadsheet is attached to the inspection report.[jm]