



CHROMIUM ELECTROPLATING/ANODIZING



COMPLIANCE INSPECTION CHECKLIST

INSPECTION TYPE: ANNUAL (INS1, INS2) COMPLAINT/DISCOVERY (CI) 2
 RE-INSPECTION (FUI) ARMS COMPLAINT NO:

AIRS ID#:	1030306	DATE:	6/2/11	TIME IN:	12:30	TIME OUT:	1:00pm
FACILITY NAME:	Freedom Metal Finishing Inc.						
FACILITY LOCATION:	5095 113th Avenue North Clearwater, FL, 33760						
RESPONSIBLE OFFICIAL:	Keith E. Eidschun	Phone No.:	727-573-2464				
PERMIT NO.	1030306-004-AG	EXP. DATE:	5/28/2015				
CONTACT:	Keith E. Eidschun	PHONE:	727-573-2464				

PART I: NOTIFICATION

(check appropriate box) **Facility Compliance Status:** IN
 1. New facility notified DARM 30 days prior to startup (ARMS Data) MNC
 2. Facility failed to notify DARM to use a general permit SNC

PART II: CLASSIFICATION

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 Decorative Chrome -----
 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?

1. 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
2. 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
3. Maintenance records for the source, add-on pollution control devices, and monitoring equipment (equipment identified, date performed, description). ----- Yes No
4. 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
5. Results of all performance tests.----- Yes No N/A
6. 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

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

I met with the Chemist John Kripinski, and toured the facility. There have been no changes in plating processes. They are still using Benchbrite 1800 for suppressant. He stated they purchased 15 gallons a year for the tanks. (See copies attached) Mr. Kripinski stated they were trying to get their client that uses the decorative chrome tank to switch to a different process so, they could stop using the Decorative tank. He stated the Decorative Chromium tank is still used very infrequently 1 time a month. The tanks had only been used for 1.5 hour since January 2011.

The chromium Anodizing tank is used daily. I observed the Chromium anodizing and Decorative chrome tanks and they were not in use at this time. (See photos) The facility is required to maintain tanks below 45 Dynes/cm (3.1×10^{-3} lb-f/ft). I reviewed records and this was in compliance with the rule requirement. Mr. Kripinski gave copy of their records for the surface tension checks. (See attached copies) The records are kept by the operators for hours in use and information is transfer into the labs computer. The records were reviewed from July 2010 through June 2011, the highest Dynes /cm (3.1×10^{-3} lb-f/ft). for the tanks.

The highest reading for the Chromium Anodizing tank was 44.2 Dynes/cm (3.1×10^{-3} lb-f/ft) in Oct13, 2010. The highest reading for the Decorative Chrome tank was 42.8 Dynes/cm (3.1×10^{-3} lb-f/ft) in April 2011. They added Benchbrite CR 1800 in Feb and lowered the surface tension to 43.7/cm (3.1×10^{-3} lb-f/ft). 40 CFR Part 63, 63.342 c(5)(ii) (B) compliance provisions - states if no exceedance during monitoring the surface tension test should be performed once every 40 hours or 2400 minutes. The facility performs their monitoring of tanks every 1500 – 1700 minutes to prevent exceedance of surface tension and to stay within the rule under 2400 minutes. The records reviewed showed no exceedance from July 2010 to June 2011. The records were reviewed the highest time the tanks were in use prior to testing was 1980 minutes, which is below the limitation and in compliance with the rule. The facility had no exceedance at this time as records show was below the limitation and in compliance with the rule. The Last surface test was performed on 6/17/2011.

The facility has added 3 spray booths for paint coating and one powder coating booth and oven. I requested the material usage for the paints and solvents. This facility could need to be assessed for 6 H certification and determine if the painting changes the permit requirements, or if the RACT applies.

The facility records showed that the paint and solvent usage was 423 gallons for the 12 month Period of July 1, 2010 – June 30th 2011. The VOC contents ranges were 2.5 – 7.3 per gallon. The total VOC emissions were 1845.1 lbs. Mr. Flannigan stated their clients are aerospace and commercial, spraying on metal substrates. The facility at this time is under the RACT limit of 750 gallons, and less than one ton of VOC emissions. I asked Mr. Keith E. Eidschun if they had notified FDEP regarding changes and possible different permit requirement.

June 21, 2011

Inspector=s Name (Please Print)

Shea Jackson

Date of Inspection

~ 2012

Inspector=s Signature

Approximate Date of Next Inspection

Freedom Metal Finishing Inc.
5095 113th Avenue North, Clearwater



Project Id: 75788 **Permit No:** 1030306-004-AG **Arms Number:** 0306

Inspector: Shea Jackson **Inspection Date / Time:** 6/27/2011 / _____

Source (EU): Existing Decorative Chromium Electroplating & Anodizing Facility with Two Tanks. Fume Suppressant with a Wetting Agent is Used as a Control in Both Tanks

Description: [The facility maintains the Tank suppressant and Dynes level is recorded in this computer in the lab area by the Chemist.]

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Description: [The facility maintains the Msd sheets for the chemicals in the lab for the tanks operations]

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Description: [The anodizing tank was not in use at this time]

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Description: [The rectifier for the tank is adjacent to the tank area.]

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Source (EU): Existing Decorative Chromium Electroplating & Anodizing Facility with Two Tanks. Fume Suppressant with a Wetting Agent is Used as a Control in Both Tanks

Description:[This is one of the spray booths added to the facility for aerospace and commercial painting of metal parts.]

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Inspector: Shea Jackson

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Source (EU): Existing Decorative Chromium Electroplating & Anodizing Facility with Two Tanks. Fume Suppressant with a Wetting Agent is Used as a Control in Both Tanks

Description: [This is the second one of the spray booths added to the facility for aerospace and commercial painting of metal parts.]

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Inspector: Shea Jackson **Inspection Date / Time:** 6/27/2011

Source (EU): Existing Decorative Chromium Electroplating & Anodizing Facility with Two Tanks. Fume Suppressant with a Wetting Agent is Used as a Control in Both Tanks

Description:[This is third one of the spray booths added to the facility for aerospace and commercial painting of metal parts.]

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Inspector: Shea Jackson **Inspection Date / Time:** 6/27/2011

Source (EU): Existing Decorative Chromium Electroplating & Anodizing Facility with Two Tanks. Fume Suppressant with a Wetting Agent is Used as a Control in Both Tanks

Description: [The oven and booth which is not operational at this time for powder coating]